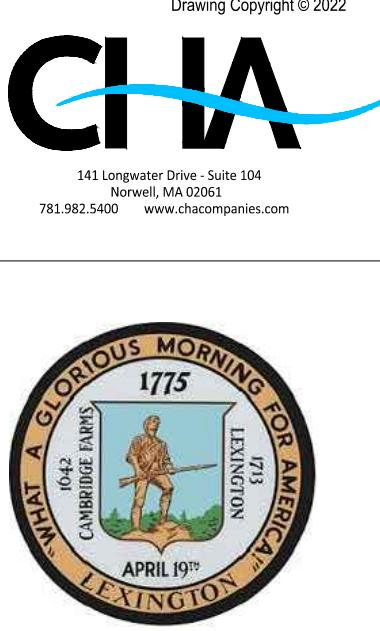


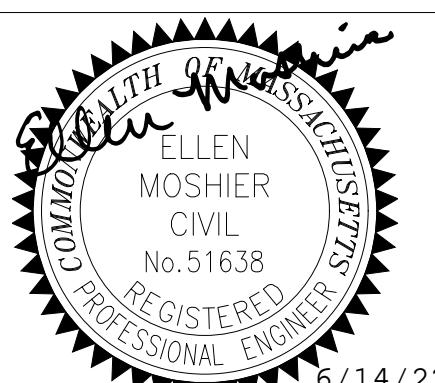
# **TOWN OF LEXINGTON MIDDLESEX COUNTY HIGHWAY DEPARTMENT**



**TOWN OF  
LEXINGTON,  
MASSACHUSETTS**

**HIGHWAY  
DEPARTMENT**

**LINCOLN STREET  
SIDEWALK  
PROJECT**

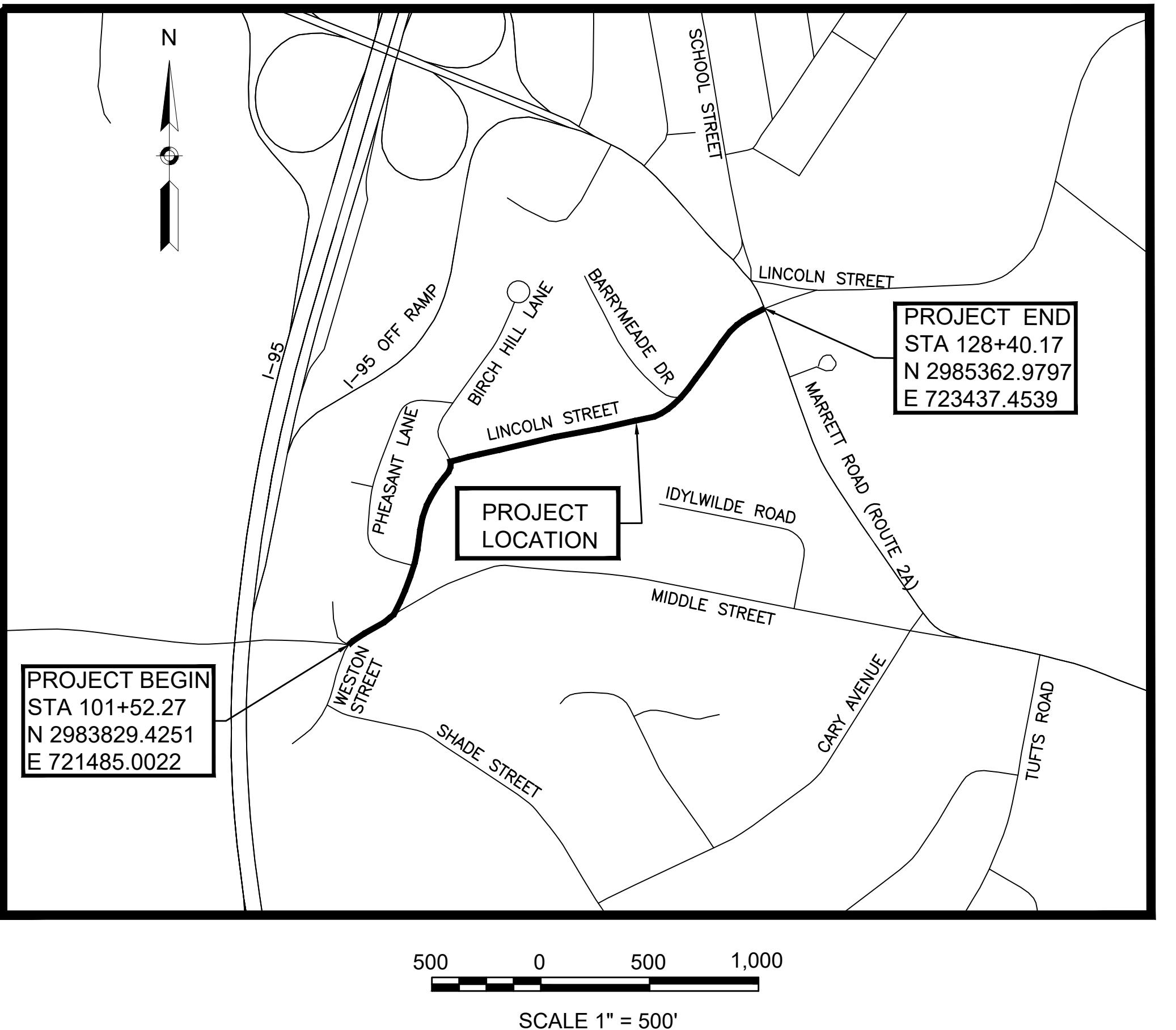


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

# **TITLE SHEET & INDEX**

No.	Submittal / Revision	App'd.	By	Date
1	CONCEPT			10/22/21
2	CONCEPT - REV 1			01/05/22
3	PRELIM			03/02/22
4	PRELIM - REV 1			03/09/22
5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

THESE PLANS ARE SUPPLEMENTED BY THE MASSDOT 2022 STANDARD SPECIFICATIONS, OCTOBER 2017 CONSTRUCTION DETAILS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.



Designed By: DC/JB	Drawn By: DC/JB	Checked By: JGM
Issue Date: 06-14-2022	Project No: 71414	Scale: NTS

Drawing No.:  
**1 OF 20**

## **GENERAL NOTES**

1. THIS PLAN IS BASED UPON ON-THE-GROUND INSTRUMENT SURVEYS PERFORMED BY GCG ASSOCIATES IN MARCH 2018 AND SEPTEMBER 2021 AND SUPPLEMENTED WITH ADDITIONAL SURVEY INFORMATION FROM THE TOWN OF LEXINGTON NOVEMBER 2021 THROUGH MAY 2022.
2. LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY, AND ARE NOT WARRANTED TO BE CORRECT. UNDERGROUND UTILITIES ARE SHOWN BASED ON AVAILABLE TOWN AND UTILITY RECORDS. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT INDICATED ON THESE PLANS. ALL EXISTING UTILITIES SHALL BE VERIFIED FOR SERVICE, SIZE, INVERT ELEVATION, LOCATION, ETC. BY THE CONTRACTOR PRIOR TO NEW CONNECTIONS TO OR OF SAME. CONTRACTOR MUST NOTIFY DIG-SAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION. NOTIFY THIS FIRM OF ANY AND ALL DISCREPANCIES PRIOR TO COMMENCING ANY WORK. NAMES AND CONTACTS FOR UTILITY OPERATING AUTHORITIES ARE AVAILABLE UPON REQUEST.
3. HORIZONTAL AND VERTICAL DATUMS REFERENCED FROM NAD OF '83 AND NAVD OF '88.
4. ANY SPOT ELEVATIONS ARE PUBLISHED FOR DESIGN PURPOSES ONLY.
5. THE CONTRACTOR SHALL MAKE DETERMINATIONS OF SUBSURFACE CONDITIONS, INCLUDING THE LOCATION OF ROCK AND THE ACTUAL LOCATION OF UTILITIES OR OTHER FEATURES WHICH MAY AFFECT THE WORK.
6. THE CONTRACTOR SHALL CAUSE AS LITTLE INTERFERENCE AND INCONVENIENCE TO ABUTTERS AS POSSIBLE. THE CONTRACTOR SHALL MAINTAIN SAFE AND CONVENIENT ACCESS TO PRIVATE PROPERTIES AT ALL TIMES.
7. THE FLOW OF TRAFFIC THROUGH CONSTRUCTION ZONES IN EXISTING PUBLIC WAYS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE SPECIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.
8. A MINIMUM OF 4" LOAM AND SEED SHALL BE PLACED AS NOTED ON THE PLANS AND ON DISTURBED AREAS.
9. PROPERTY LINES SHOWN HEREON ARE COMPILED FROM VARIOUS SOURCES AND DO NOT REPRESENT A PROPERTY LINE RETRACEMENT SURVEY.
10. A MINIMUM UNOBSTRUCTED WIDTH OF 52" SHALL BE MAINTAINED ON ALL PROPOSED SIDEWALKS AND DRIVEWAYS TO ACCOMMODATE THE TOWN OF LEXINGTON'S SIDEWALK SNOWPLOW.
11. MAILBOXES TO BE RESET SHALL BE RESET PER MASSDOT STANDARD DETAIL E 504.1.0 AND AS SHOWN ON THESE PLANS AND DIRECTED BY THE ENGINEER.
12. RESOURCE AREA BOUNDARIES WERE EVALUATED AND FLAGGED BY CHA CONSULTING, INC. ON DECEMBER 28, 2021.
13. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A CONSTRUCTION SCHEDULE DELINEATING THE SEQUENCE OF WORK, TRAFFIC MANAGEMENT PLAN, AND ESTIMATED TIME OF COMPLETION OF EACH SEGMENT OF WORK, PRIOR TO THE COMMENCEMENT OF WORK.
14. THE CONTRACTOR SHALL MAINTAIN CONTINUOUS TRAFFIC FLOW DURING CONSTRUCTION SATISFACTORY TO THE ENGINEER AND THE TOWN. ACCESS TO ALL EXISTING RESIDENCES SHALL BE MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE PARKING LOT DURING CONSTRUCTION FOR ALL RESIDENTS. CONTRACTOR SHALL PROVIDE PROPER NOTICE TO ALL RESIDENTS WHEN ACCESS AND EGRESS IS IMPEDED OR OBSTRUCTED. CONTRACTOR CONSTRUCTION SCHEDULE SHALL INCLUDE PROJECT PHASING TO ENSURE MAINTENANCE OF ACCESS AND SUFFICIENT PARKING THROUGHOUT THE CONSTRUCTION PERIOD.
15. NO EQUIPMENT SHALL BE ALLOWED TO BE PARKED ON THE ROAD WHEN NOT IN USE. MATERIALS SHALL NOT BE STOCKPILED ON THE ROAD OR IN PARKING AREAS. THE CONTRACTOR SHALL CONSULT THE LEXINGTON DEPARTMENT OF PUBLIC WORKS WITH RESPECT TO LOCATION OF STOCKPILED MATERIALS.
16. SIDEWALKS, WALKS, AND DRIVEWAYS THAT ARE DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL ONCE THE WORK IS COMPLETED.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING ANY DEBRIS, SEDIMENT, OR SILTY WATER FROM ENTERING DRAINAGE SYSTEM, ETC., DURING ALL PHASES OF CONSTRUCTION. CONTROLS MAY INCLUDE HAY BALES, SILT FENCE, SILT SACKS, CRUSHED STONE.

18. ALL CONSTRUCTION MATERIAL, DEBRIS, ASPHALT, SOIL, ETC. THAT IS REMOVED FROM THE SITE SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

19. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT ALL PLANTS, TREES AND ROOTS OF TREES TO REMAIN. THE CONTRACTOR SHALL CONSULT WITH A CERTIFIED ARBORIST AND IMPLEMENT THE RECOMMENDED TREE & PLANT PROTECTION MEASURES. THIS MAY INCLUDE TREE & PLANT PROTECTION FENCE, TREE ARMORING, ROOT PRUNING, AND AIR EXCAVATION. ADDITIONAL TREE REMOVALS MAY BE REQUIRED IN ADDITION TO WHAT IS SHOWN ON THESE PLANS AS DIRECTED BY THE ENGINEER.

20. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SITE DRAINAGE PATTERNS UNLESS OTHERWISE NOTED. ALL GRADING MODIFICATIONS SHALL DIRECT DRAINAGE AWAY FROM EXISTING BUILDINGS AND TOWARDS THE APPROPRIATE AREAS. ALL GRADING MODIFICATIONS SHALL BE GRADUAL SO AS NOT TO CREATE ANY STEEP SLOPES, UNEVEN AREAS, ETC.

21. DURING THE COURSE OF CONSTRUCTION, ANY DAMAGE TO FENCES, PATHS, STAIRS, AND VEGETATION SHALL BE REPAIRED OR REPLACED AND RESTORED TO THE ORIGINAL CONDITION AT NO ADDITIONAL EXPENSE TO THE OWNER.

22. ALL CASTINGS, GATE BOXES, HYDRANTS, LIGHT POLES, ETC. DAMAGED DURING CONSTRUCTION SHALL BE SUPPLIED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

23. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND PROCEDURES, AND FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ALL WORK INCLUDED UNDER THIS CONTRACT. THE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL SAFETY BARRIERS, WARNING FLASHERS AND THE LIKE, AS REQUIRED BY THE CONDUCT OF THE WORK FOR THE PROTECTION OF WORKERS AND NON-WORKERS ALIKE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO OSHA REQUIREMENTS.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE RESTORATION AND CLEAN-UP UPON COMPLETION OF THE PROJECT.

25. THE FINAL LOCATION OF PROPOSED TREES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

## GENERAL SYMBOLS

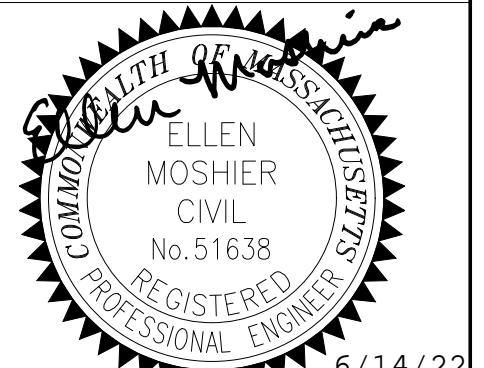
141 Longwater Drive - Suite 104  
Norwell, MA 02061  
781.982.5400 [www.chacompanies.com](http://www.chacompanies.com)



**TOWN OF  
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# **LEGEND & ABBREVIATIONS**

Submittal / Revision	App'd.	By	Date
CONCEPT			10/22/21
CONCEPT - REV 1			01/05/22
PRELIM			03/02/22
PRELIM - REV 1			03/09/22
FINAL			06/02/22
FINAL REV 1			06/14/22

## **ABBREVIATIONS**

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<u>GENERAL</u>		<u>GENERAL</u>	
AADT	ANNUAL AVERAGE DAILY TRAFFIC	CONST	CONSTRUCTION
ABAN	ABANDON	CR GR	CROWN GRADE
ADJ	ADJUST	DHV	DESIGN HOURLY VOLUME
APPROX.	APPROXIMATE	DI	DROP INLET
A.C.	ASPHALT CONCRETE	DIA	DIAMETER
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE	DIP	DUCTILE IRON PIPE
BBC	BITUMINOUS BERM CURB	DW	STEADY DON'T WALK - PORTLAND ORANGE
BIT.	BITUMINOUS	DWY	DRIVEWAY
BC	BOTTOM OF CURB	ELEV (or EL.)	ELEVATION
BCC	BOTTOM OF CURVED CURB	EMB	EMBANKMENT
BD.	BOUND	EOP	EDGE OF PAVEMENT
BL	BASELINE	EXIST (or EX)	EXISTING
BLDG	BUILDING	EXC	EXCAVATION
BM	BENCHMARK	F&C	FRAME AND COVER
BO	BY OTHERS	F&G	FRAME AND GRATE
BOS	BOTTOM OF SLOPE	FDN.	FOUNDATION
BR.	BRIDGE	FLDSTN	FIELDSTONE
CB	CATCH BASIN	GAR	GARAGE
CBCI	CATCH BASIN WITH CURB INLET	GD	GROUND
CC	CEMENT CONCRETE	GG	GAS GATE
CCB	CAPE COD BERM	GI	GUTTER INLET
CCM	CEMENT CONCRETE MASONRY	GIP	GALVANIZED IRON PIPE
CEM	CEMENT	GRAN	GRANITE
CI	CURB INLET	GRAV	GRAVEL
CIP	CAST IRON PIPE	GRD	GUARD
CLF	CHAIN LINK FENCE	HDW	HEADWALL
CL	CENTERLINE	HMA	HOT MIX ASPHALT
CMP	CORRUGATED METAL PIPE	HOR	HORIZONTAL
CSP	CORRUGATED STEEL PIPE	HYD	HYDRANT
CO.	COUNTY	INV	INVERT
CONC	CONCRETE	JCT	JUNCTION
CONT	CONTINUOUS	L	LENGTH OF CURVE

<u>GENERAL</u>		<u>GENERAL</u>	
LB	LEACH BASIN		
LP	LIGHT POLE		
LT	LEFT	REM	REMOVE
MAX	MAXIMUM	RET	RETAIN
MB	MAILBOX	RET WALL	RETAINING WALL
MH	MANHOLE	ROW	RIGHT OF WAY
MHB	MASSACHUSETTS HIGHWAY BOUND	RR	RAILROAD
MIN	MINIMUM	R&R	REMOVE AND RESET
NIC	NOT IN CONTRACT	R&S	REMOVE AND STACK
NO.	NUMBER	RT	RIGHT
PC	POINT OF CURVATURE	SB	STONE BOUND
PCC	POINT OF COMPOUND CURVATURE	SHLD	SHOULDER
PCR	PEDESTRIAN CURB RAMP	SMH	SEWER MANHOLE
P.G.L.	PROFILE GRADE LINE	ST	STREET
PI	POINT OF INTERSECTION	STA	STATION
POC	POINT ON CURVE	SSD	STOPPING SIGHT DISTANCE
POT	POINT ON TANGENT	SHLO	STATE HIGHWAY LAYOUT LINE
PRC	POINT OF REVERSE CURVATURE	SW	SIDEWALK
PROJ	PROJECT	T	TANGENT DISTANCE OF CURVE/TRUCK %
PROP	PROPOSED	TAN	TANGENT
PSB	PLANTABLE SOIL BORROW	TEMP	TEMPORARY
PT	POINT OF TANGENCY	TC	TOP OF CURB
PVC	POINT OF VERTICAL CURVATURE	TOS	TOP OF SLOPE
PVI	POINT OF VERTICAL INTERSECTION	TYP	TYPICAL
PVT	POINT OF VERTICAL TANGENCY	UP	UTILITY POLE
PVMT	PAVEMENT	VAR	VARIES
PWW	PAVED WATER WAY	VERT	VERTICAL
R	RADIUS OF CURVATURE	VC	VERTICAL CURVE
R&D	REMOVE AND DISPOSE	WG	WATER GATE
RCP	REINFORCED CONCRETE PIPE	WIP	WROUGHT IRON PIPE
RD	ROAD	WM	WATER METER/WATER MAIN
RDWY	ROADWAY	X-SECT	CROSS SECTION

#### **MARKINGS SYMBOLS**

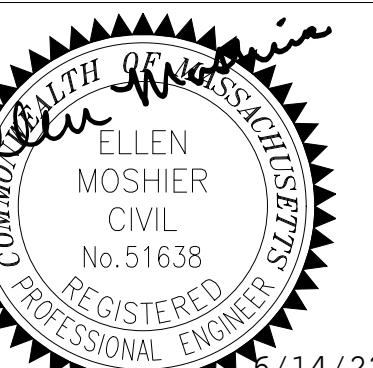
<u>ING</u>	<u>PROPOSED</u>	<u>DESCRIPTION</u>
	<u>SL</u>	STOP LINE - 12" WIDE
	 <u>CW</u>	CROSSWALK - SEE SHEET 13 FOR DETAIL
	<u>SWL</u>	SOLID WHITE LINE
	<u>DBYL</u>	DOUBLE YELLOW LINE - 6" WIDE LINES WITH 6" WIDE GAP



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# **CONSTRUCTION PLANS - 1**

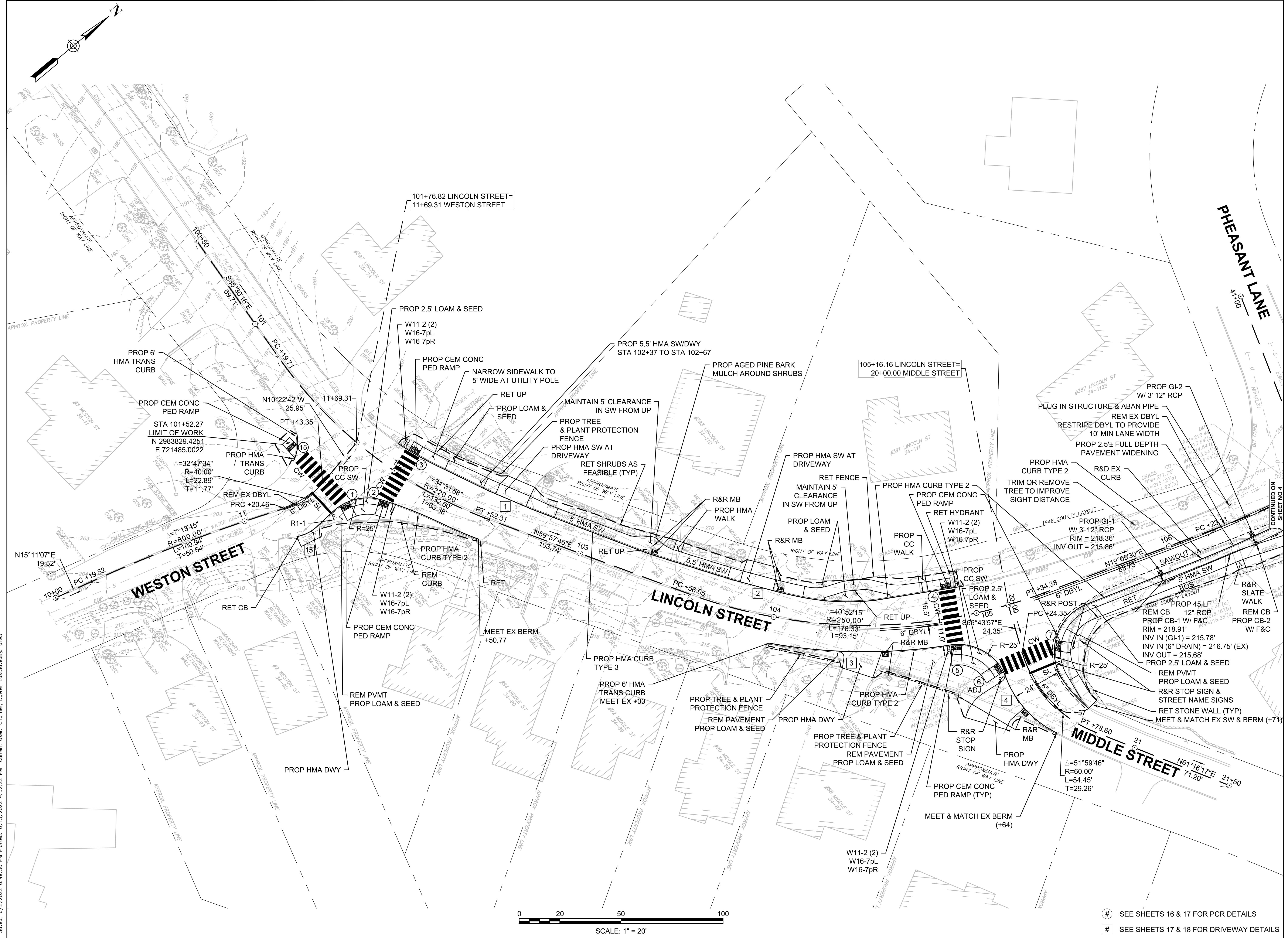
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5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

Designed By: DC/JB	Drawn By: DC/JB	Checked By: JGM
Initials D.J.B.	Project No. 100-00000	Date 01/01/00

Issue Date:	Project No.:	Scale:
06-14-2022	71414	1" = 20'

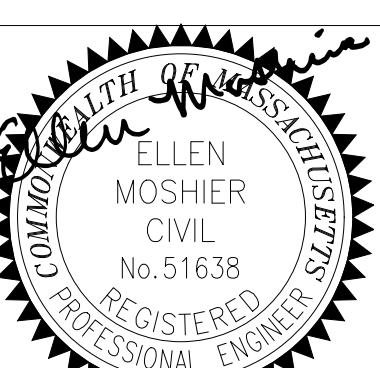
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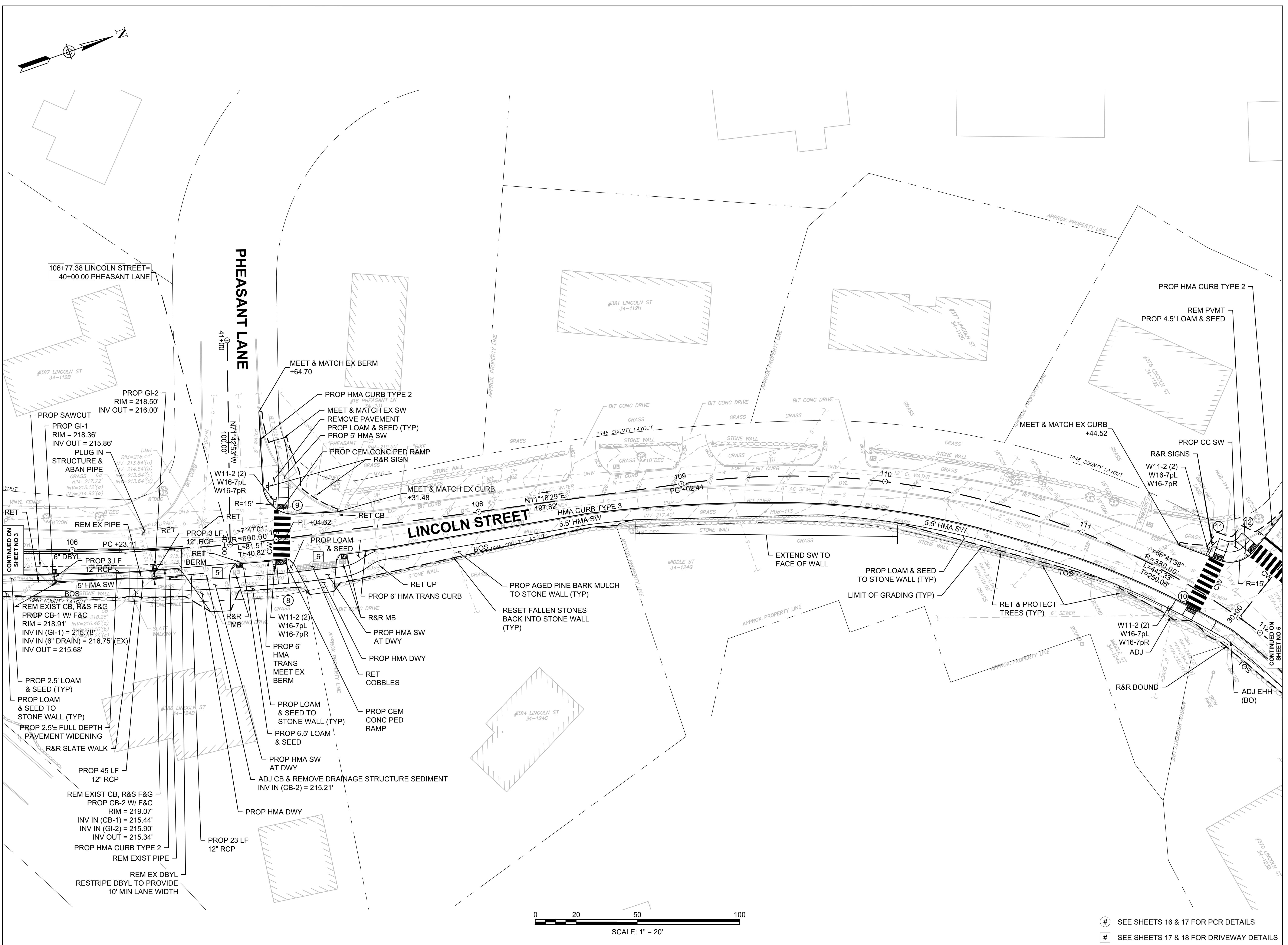


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CONSTRUCTION  
PLANS - 2

No.	Submittal / Revision	App'd	By	Date
1	CONCEPT			10/22/21
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5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

Designed By:	Drawn By:	Checked By:
DC/JB	DC/JB	JGM
Issue Date:	Project No:	Scale:
06-14-2022	71414	1" = 20'
Drawing No.:		
4	OF	20











LINCOLN STREET CONSTRUCTION BASELINE DATA

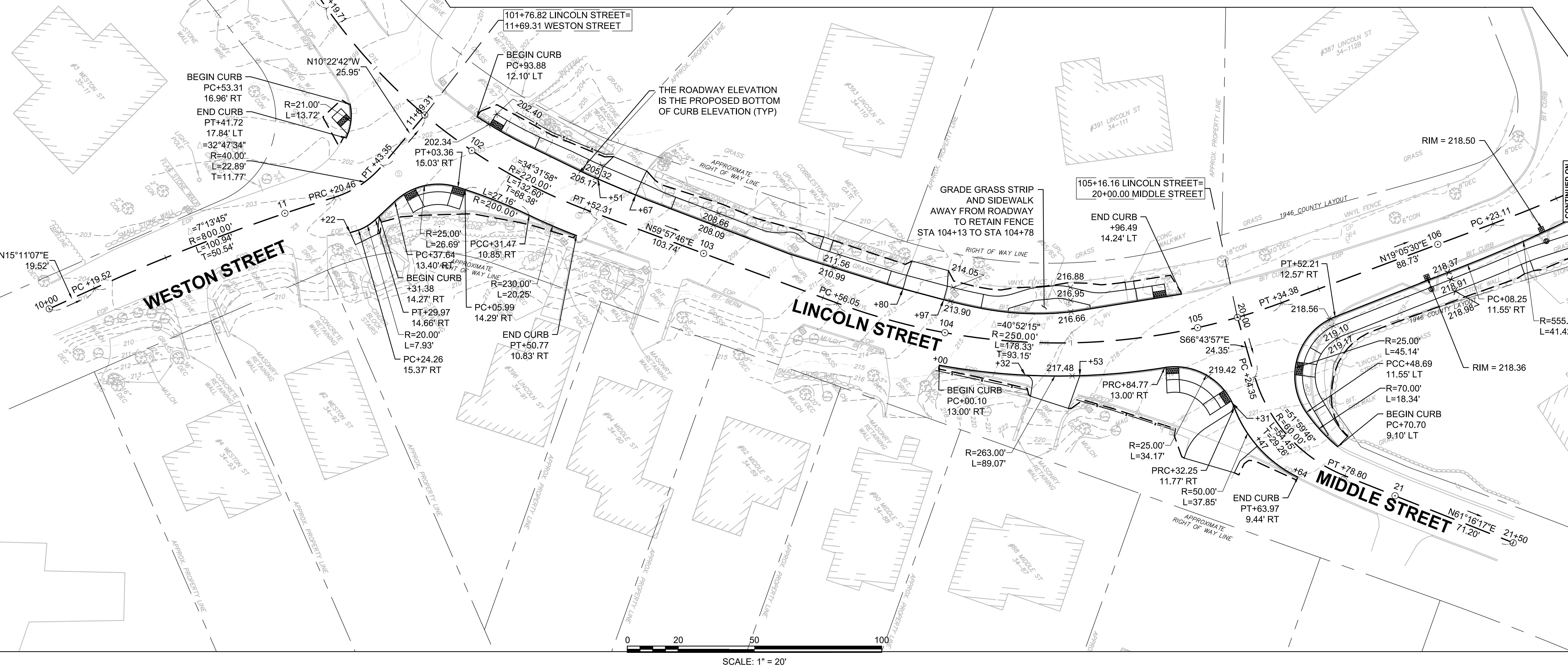
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LINE	100+50.00	2983860.6990	721381.1943		S85°30'16"E 69.71'	101+19.71	2983855.2351	721450.6896
CURVE	101+19.71	2983855.2351	721450.6896	R=220.00' Δ=34°31'58" L=132.60' T=68.38'		102+52.31	2983884.1044	721578.0574
LINE	102+52.31	2983884.1044	721578.0574		N59°57'46"E 103.74'	103+56.05	2983936.0340	721667.8671
CURVE	103+56.05	2983936.0340	721667.8671	R=250.00' Δ=40°52'15" L=178.33' T=93.15'		105+34.38	2984070.6886	721778.9751
LINE	105+34.38	2984070.6886	721778.9751		N19°05'30"E 88.73'	106+23.11	2984154.5398	721807.9976
CURVE	106+23.11	2984154.5398	721807.9976	R=600.00' Δ=7°47'01" L=81.51' T=40.82'		107+04.62	2984233.1387	721829.3523
LINE	107+04.62	2984233.1387	721829.3523		N11°18'29"E 197.82'	109+02.44	2984427.1163	721868.1410
CURVE	109+02.44	2984427.1163	721868.1410	R=380.00' Δ=66°41'38" L=442.33' T=250.06'		113+44.77	2984724.3034	722161.7696
LINE	113+44.77	2984724.3034	722161.7696		N78°00'07"E 734.80'	120+79.58	2984877.0544	722880.5199
CURVE	120+79.58	2984877.0544	722880.5199	R=300.00' Δ=41°21'19" L=216.54' T=113.23'		122+96.11	2984991.4374	723058.8554
LINE	122+96.11	2984991.4374	723058.8554		N36°38'48"E 318.74'	126+14.85	2985247.1713	723249.1031
CURVE	126+14.85	2985247.1713	723249.1031	R=450.00' Δ=22°00'45" L=172.89' T=87.52'		127+87.74	2985362.9164	723376.0955
LINE	127+87.74	2985362.9164	723376.0955		N58°39'33"E 72.41'	128+60.14	2985400.5780	723437.9389

WESTON STREET CONSTRUCTION BASELINE DATA

SEGMENT	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
LINE	10+00.00	2983695.8413	721472.2525		N15°11'07"E 19.52'	10+19.52	2983714.6801	721477.3657
CURVE	10+19.52	2983714.6801	721477.3657	R=800.00' Δ=7°13'45" L=100.94' T=50.54'		11+20.46	2983810.1716	721509.8734
CURVE	11+20.46	2983810.1716	721509.8734	R=40.00' Δ=32°47'34" L=22.89' T=11.77'		11+43.35	2983832.6296	721512.2410
LINE	11+43.35	2983832.6296	721512.2410		N10°22'42"W 25.95'	11+69.31	2983858.1575	721507.5657

## MIDDLE STREET CONSTRUCTION BASELINE DATA

SEGMENT	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
LINE	20+00.00	2984053.7032	721772.3939		S66°43'57"E 24.35'	20+24.35	2984044.0842	721794.7639
CURVE	20+24.35	2984044.0842	721794.7639	R=60.00' Δ=51°59'46" L=54.45' T=29.26'		20+78.80	2984046.5902	721847.305
LINE	20+78.80	2984046.5902	721847.3051		N61°16'17"E 71.20'	21+50.00	2984080.8132	721909.7402



A circular seal with a scalloped outer edge. The words "STATE OF MASSACHUSETTS" are written along the top inner curve, and "CIVIL ENGINEER" along the bottom inner curve. In the center, the name "ELLEN MOSHIER" is written vertically, flanked by "CIVIL" on the left and "ENGINEER" on the right. Below her name is the number "No. 51638". At the bottom of the circle, the words "REGISTERED PROFESSIONAL ENGINEER" are written in a curved, overlapping font.

VIOLATION OF LAW FOR ANY  
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# **CURB TIE & GRADING PLANS - 1**

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Designed By: DC/JB	Drawn By: DC/JB	Checked By: JGM
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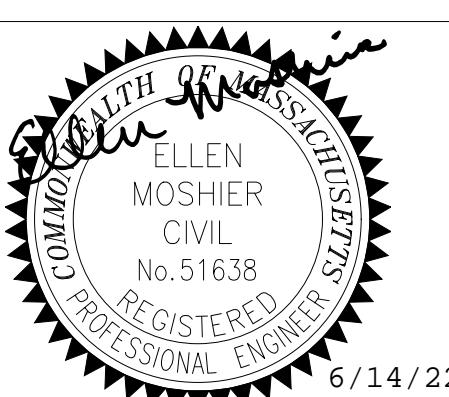
Issue Date: Project No: Scale:  
06-14-2022 71414 1" = 20'

Drawing No.:

3 OF 20



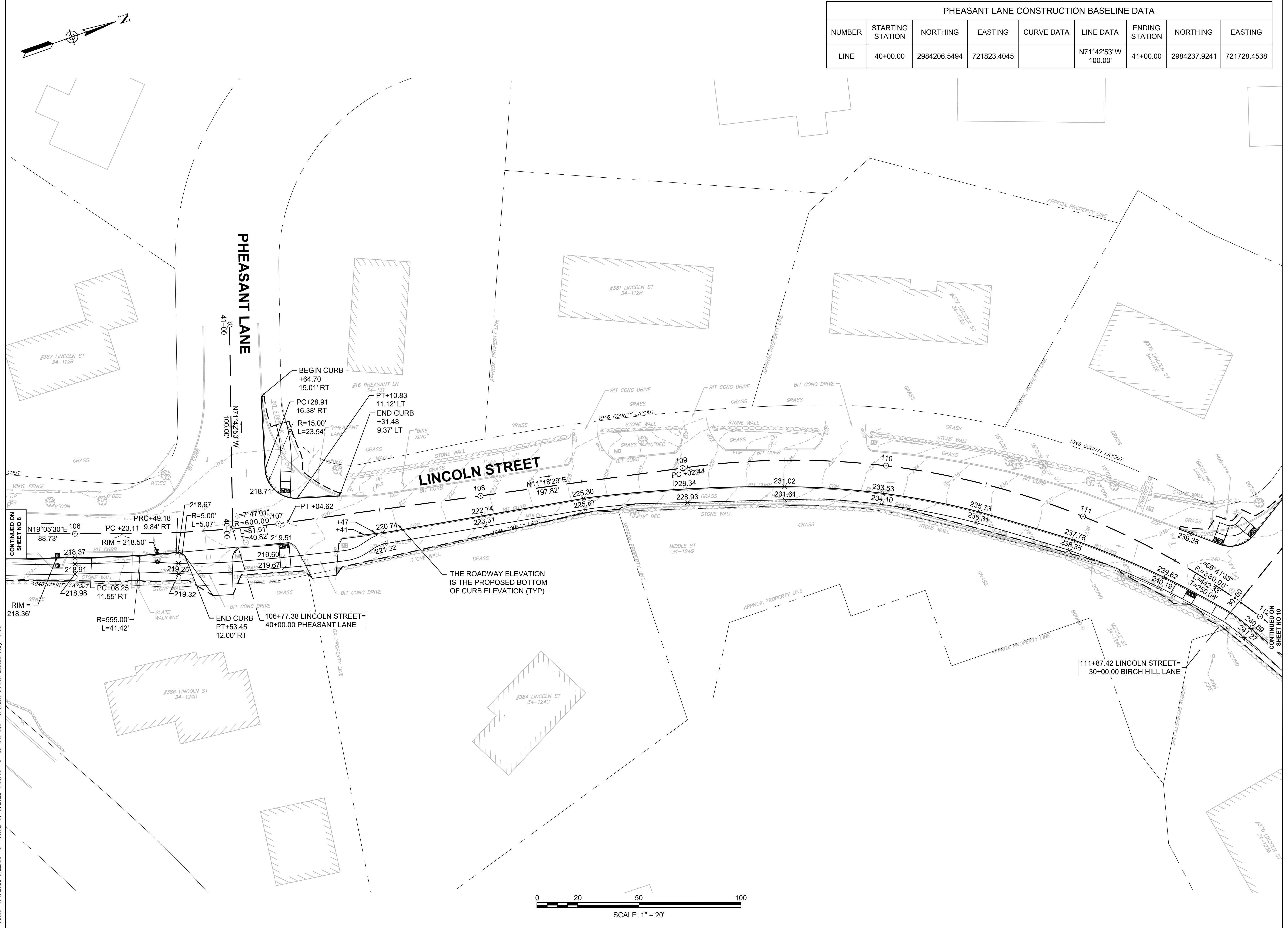
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LINCOLN STREET  
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PROJECT**

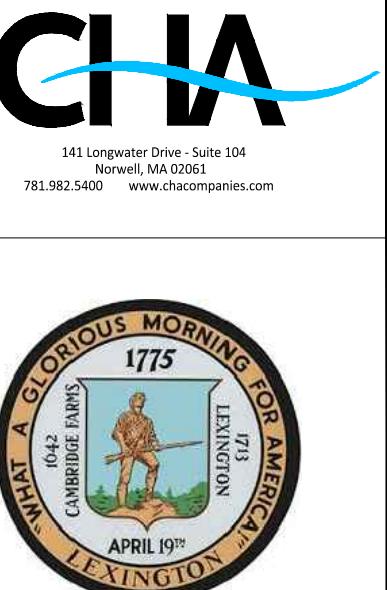


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR, TO MAKE ANY CHANGES IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE PRINTING OF THE ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR MUST BE KEPT ON THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF WHICH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

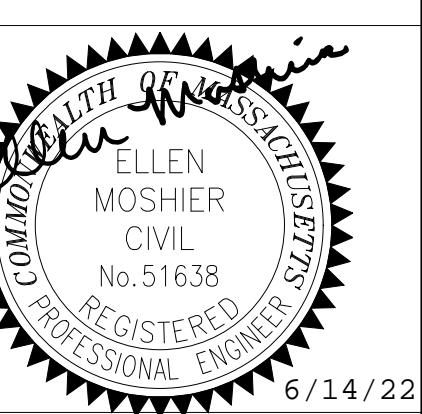
**CURB TIE &  
GRADING  
PLANS - 2**

PHEASANT LANE CONSTRUCTION BASELINE DATA								
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LINE	40+00.00	2984206.5494	721823.4045		N71°42'53"W 100.00'	41+00.00	2984237.9241	721728.4538





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CURB TIE &  
GRADING  
PLANS - 3

No.	Submittal / Revision	App'd	By	Date
1	CONCEPT			10/22/21
2	CONCEPT - REV 1			01/05/22
3	PRELIM			03/02/22
4	PRELIM - REV 1			03/09/22
5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

Designed By: DC/JB Drawn By: DC/JB Checked By: JGM

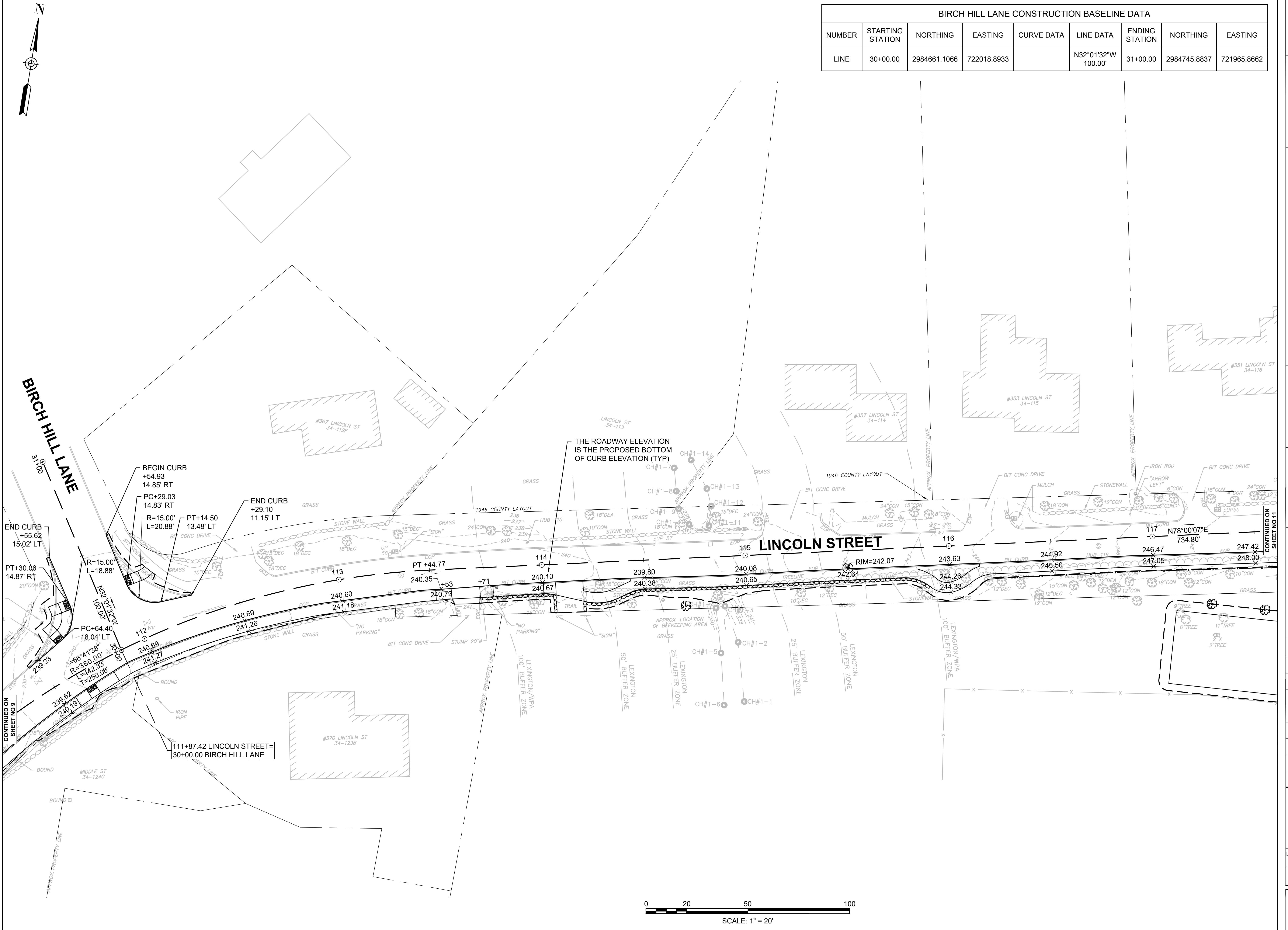
Issue Date: 06-14-2022 Project No: 71414 Scale: 1" = 20'

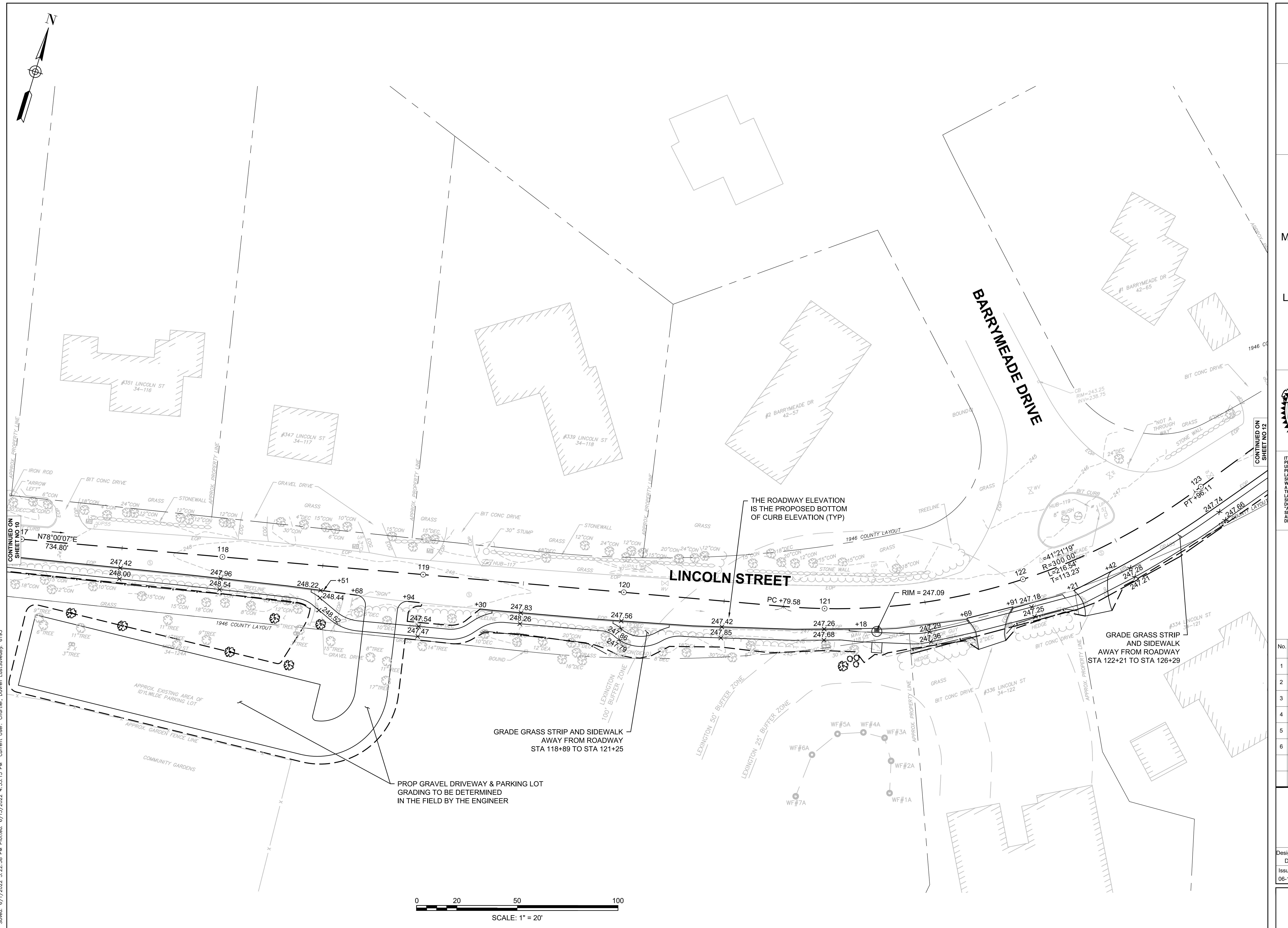
Drawing No.:

10 OF 20

BIRCH HILL LANE CONSTRUCTION BASELINE DATA

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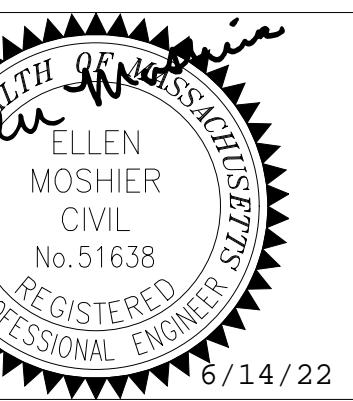
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er Drive - Suite 104



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# **CURB TIE & GRADING PLANS - 4**

No.	Submittal / Revision	App'd.	By	Date
1	CONCEPT			10/22/21
2	CONCEPT - REV 1			01/05/22
3	PRELIM			03/02/22
4	PRELIM - REV 1			03/09/22
5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

Designed By: DC/JB	Drawn By: DC/JB	Checked By: JGM
Issue Date:	Project No.:	Scale:

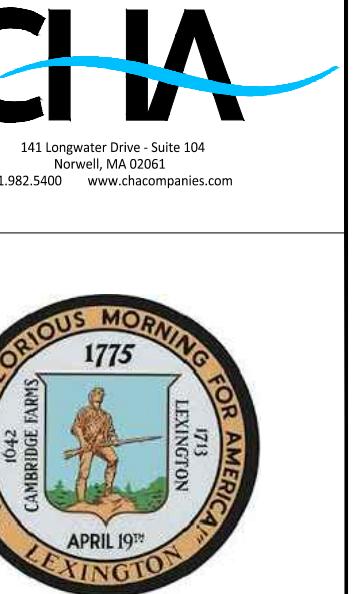
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06-14-2022 71414 1" = 20'

Drawing No.:

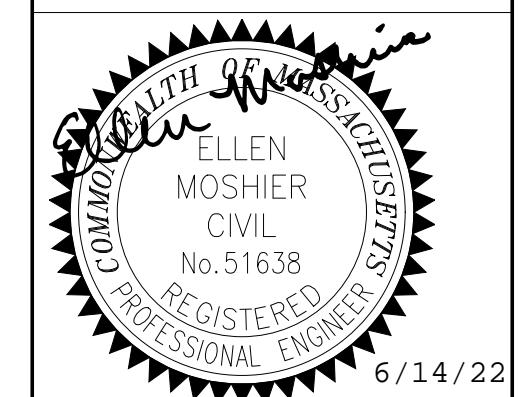
11 OF 20

11 OF 20

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### CURB TIE & GRADING PLANS - 5

No.	Submittal / Revision	App'd	By	Date
1	CONCEPT			10/22/21
2	CONCEPT - REV 1			01/05/22
3	PRELIM			03/02/22
4	PRELIM - REV 1			03/09/22
5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

Designed By: DC/JB Drawn By: DC/JB Checked By: JGM

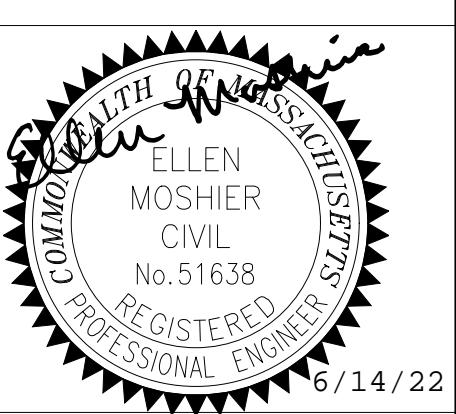
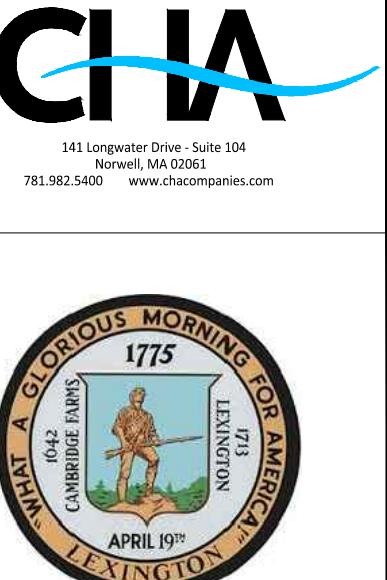
Issue Date: 06-14-2022 Project No: 71414 Scale: 1" = 20'

Drawing No.: 12 OF 20

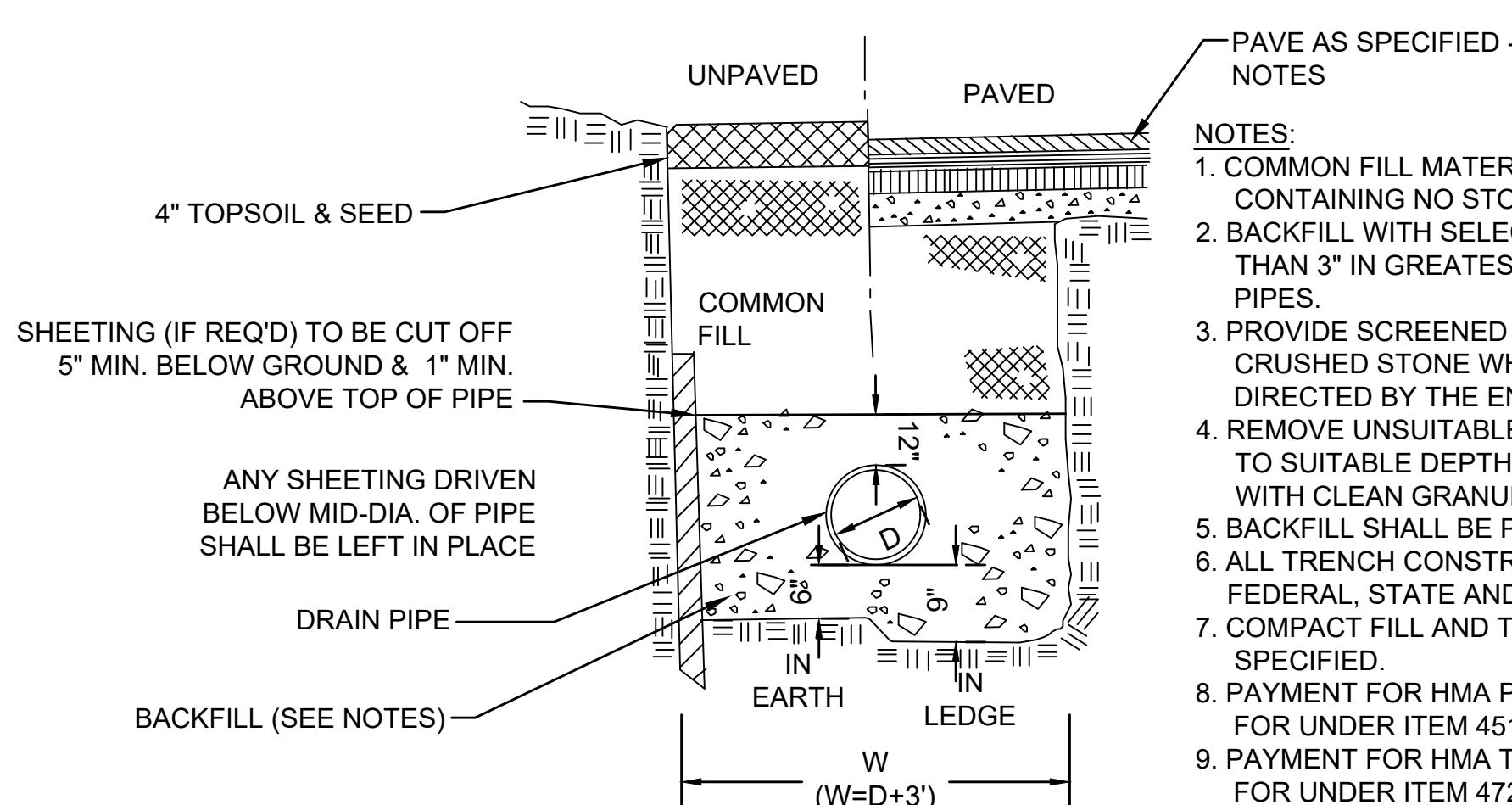
### MARRETT ROAD (RTE 2A)

MARRETT ROAD (RTE 2A)



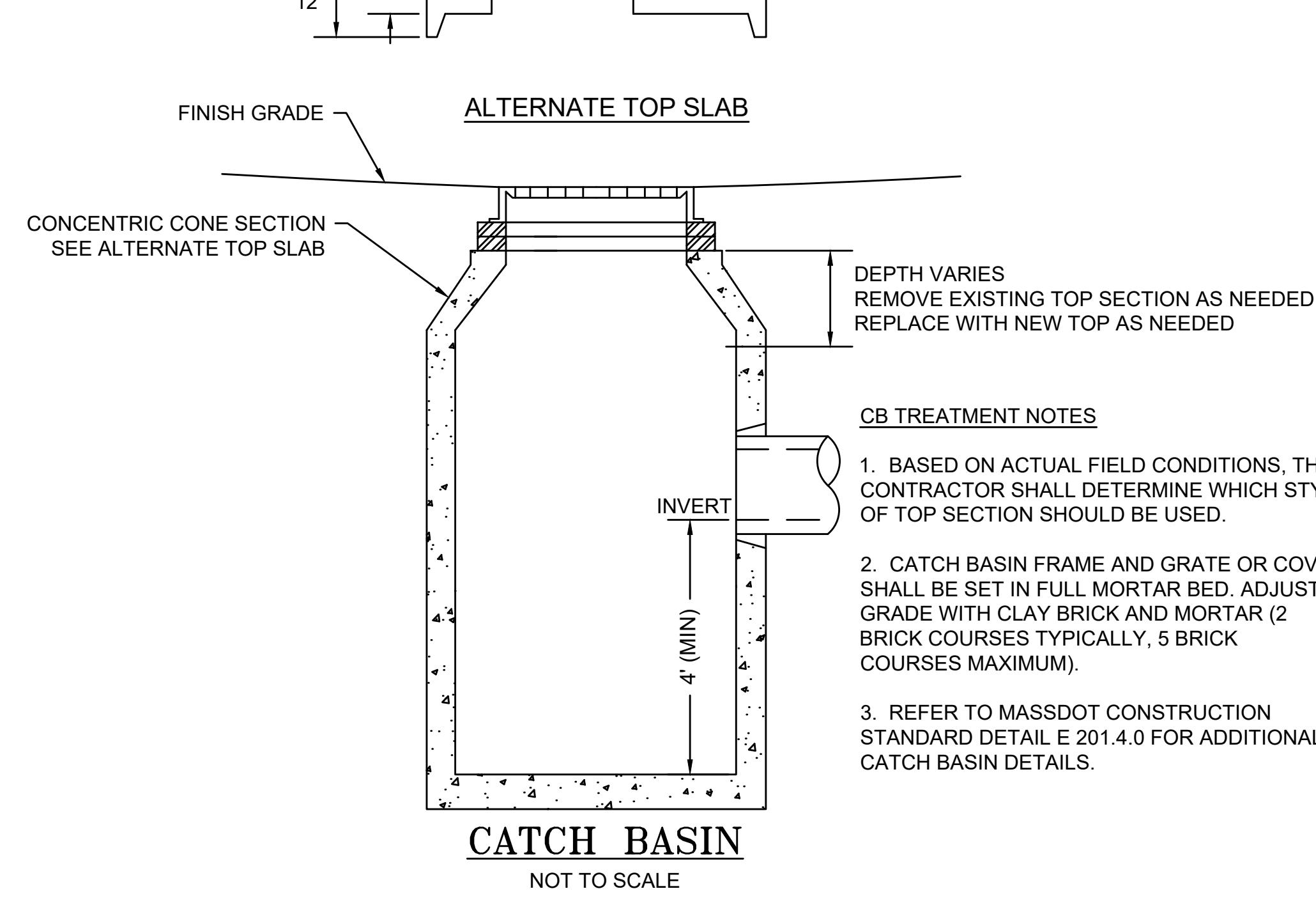
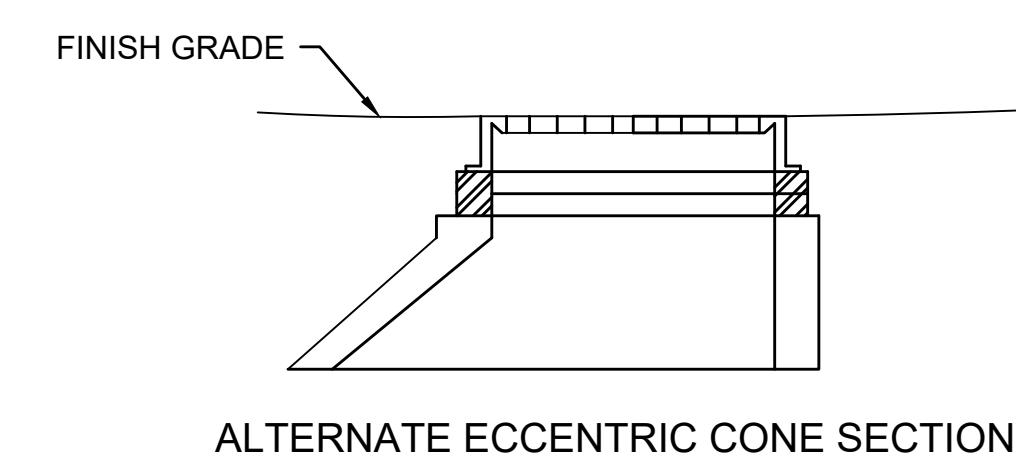
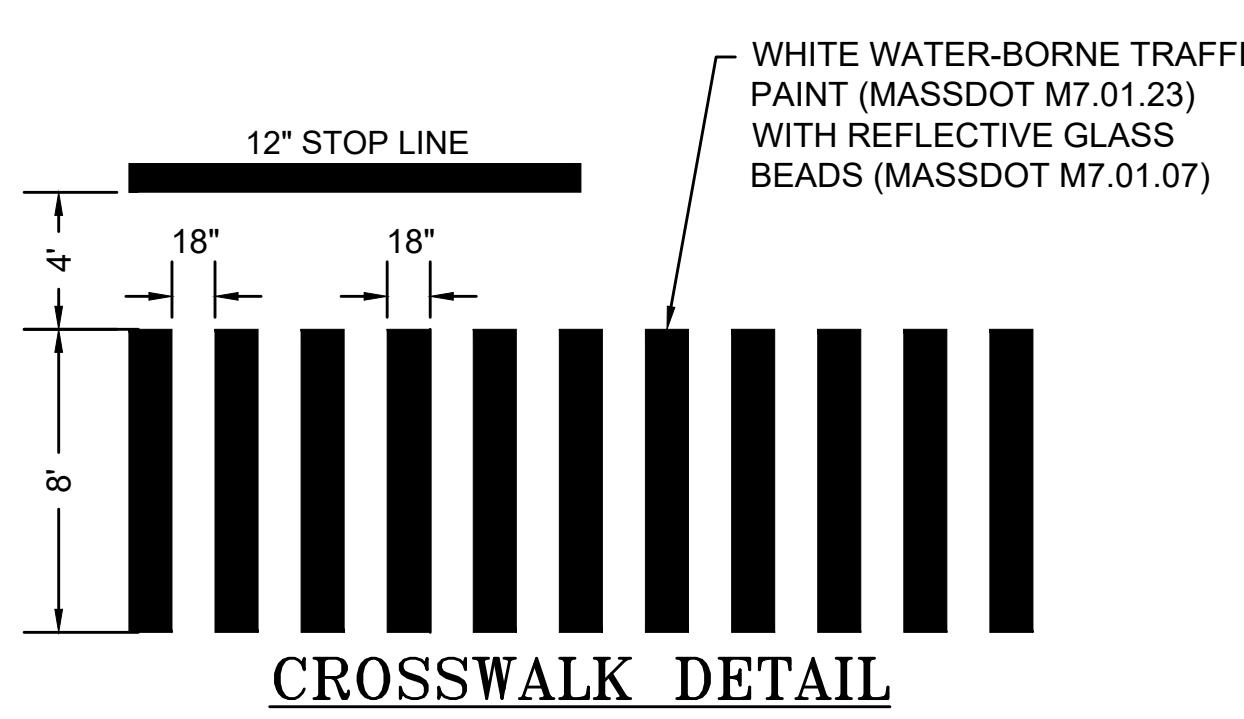


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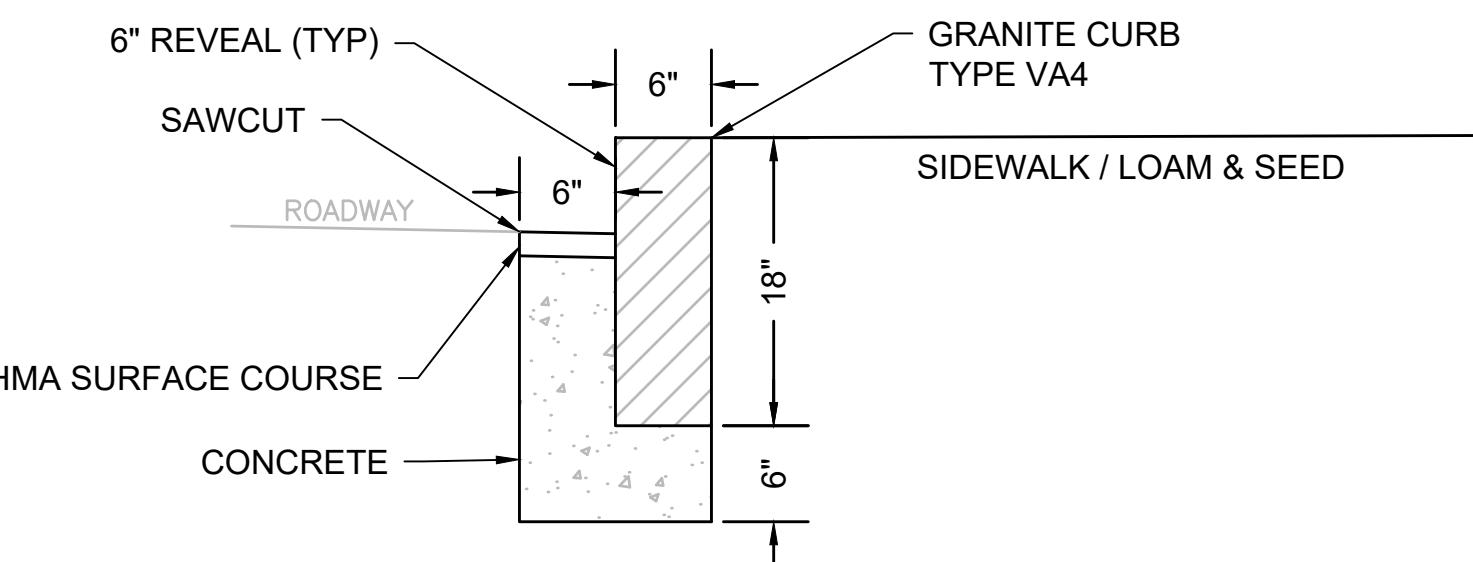
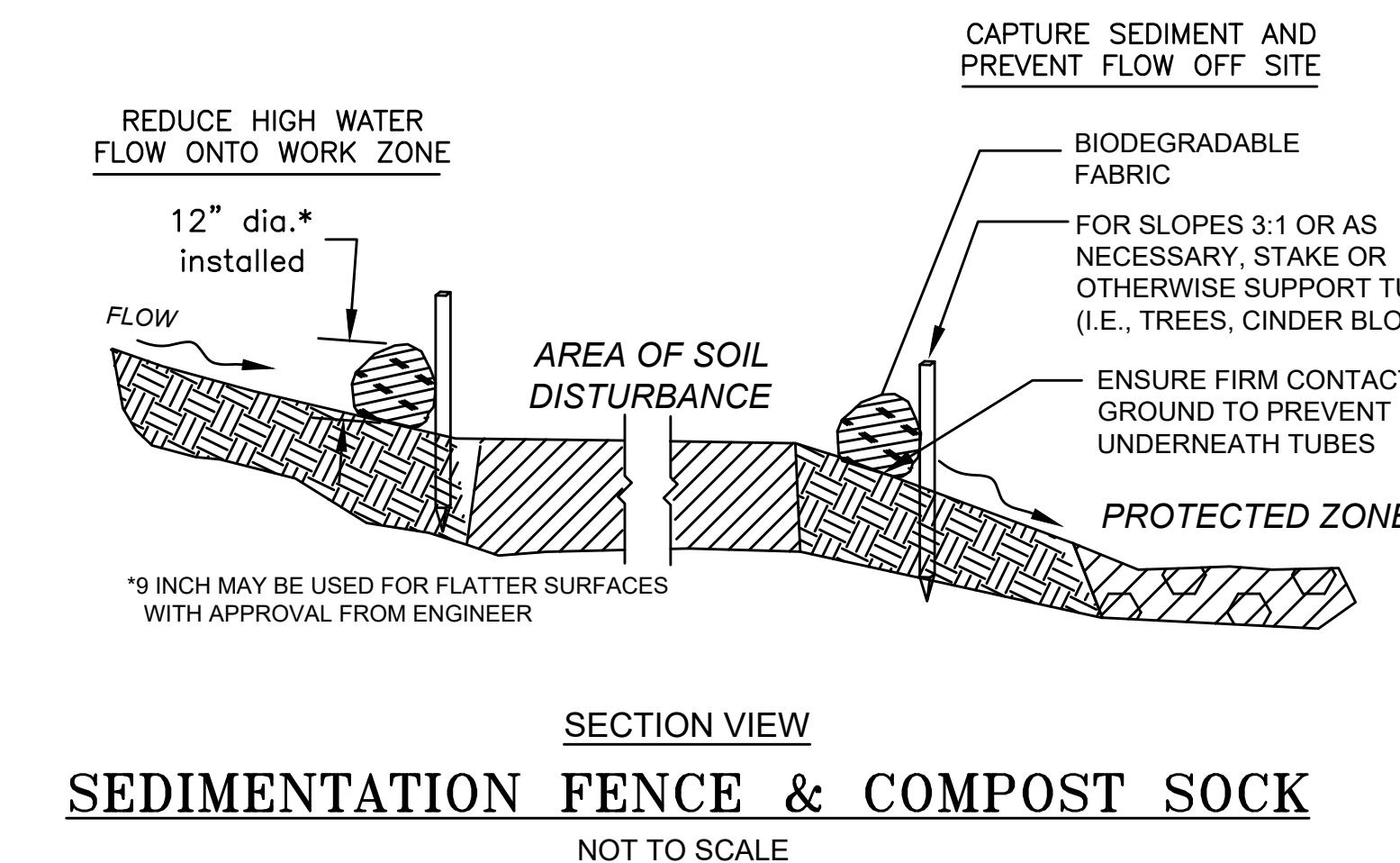
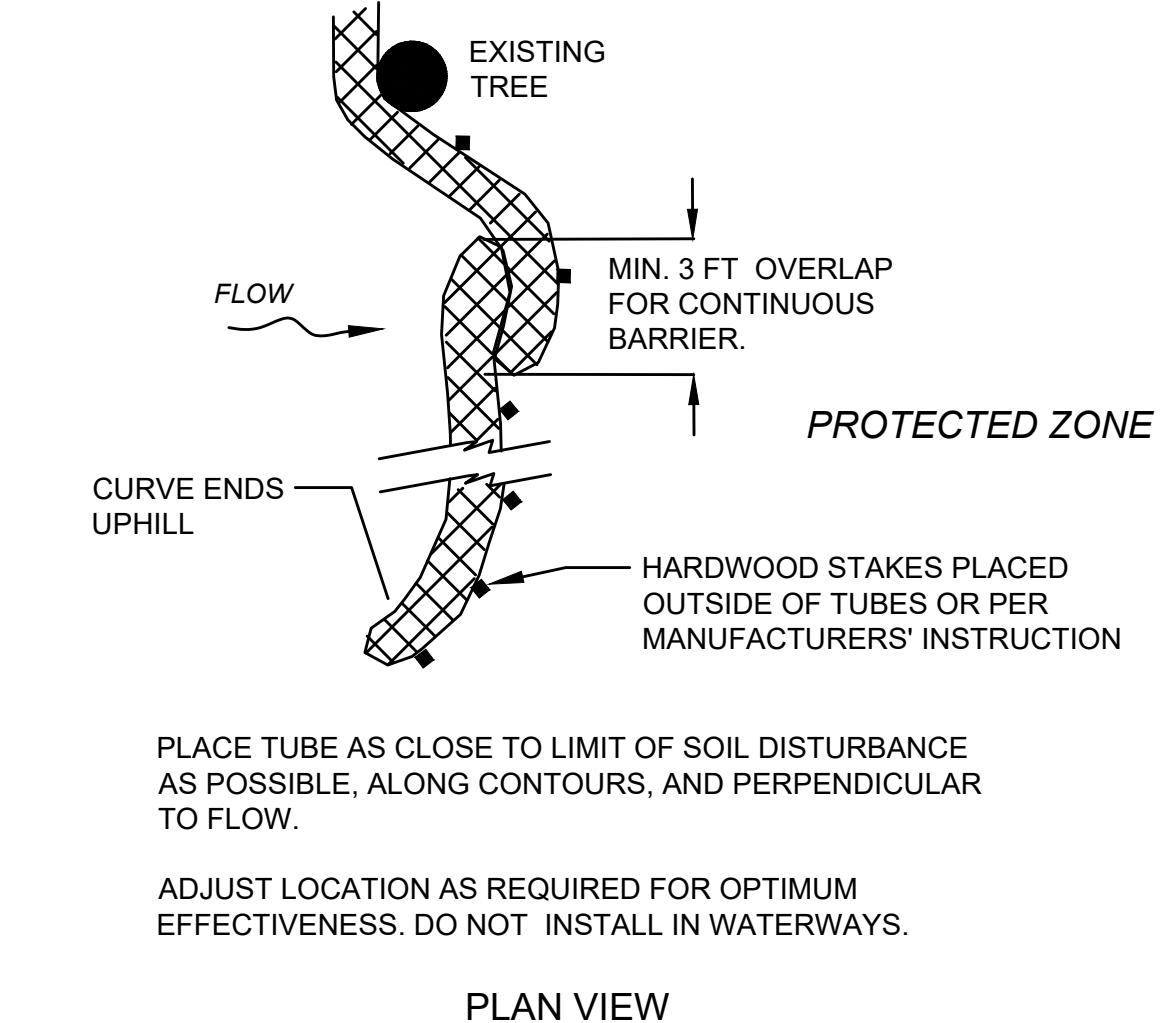
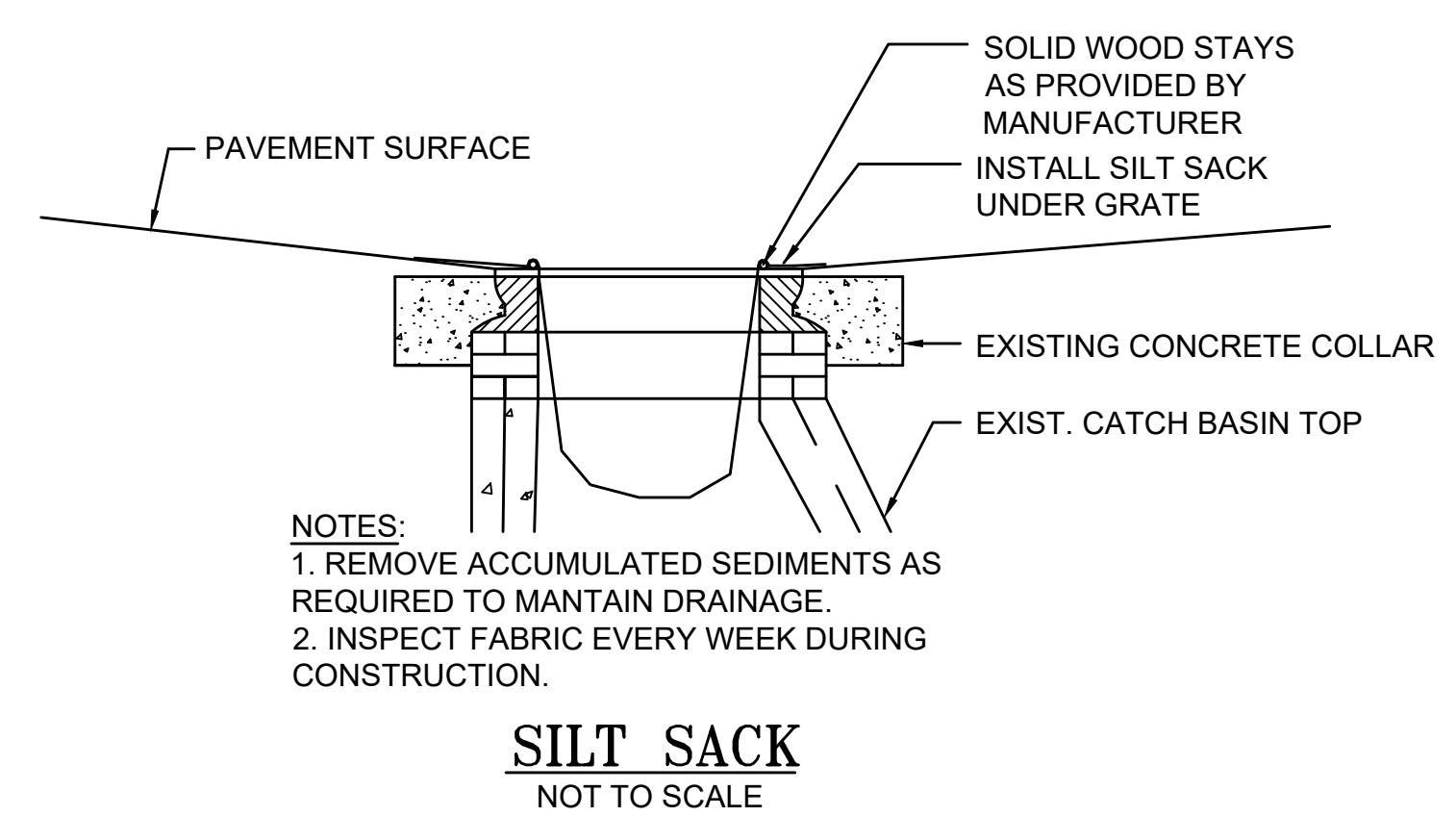


### TYPICAL TRENCH SECTIONS

NOT TO SCALE

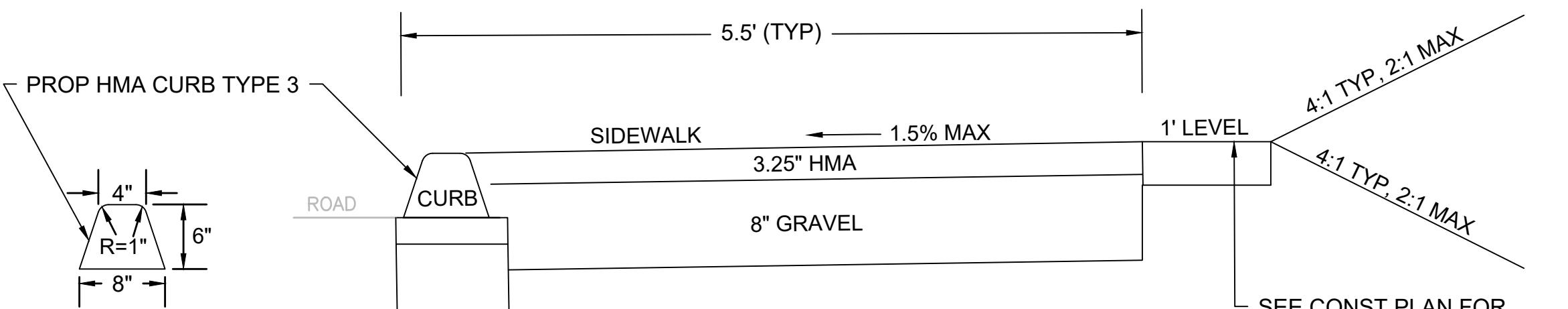


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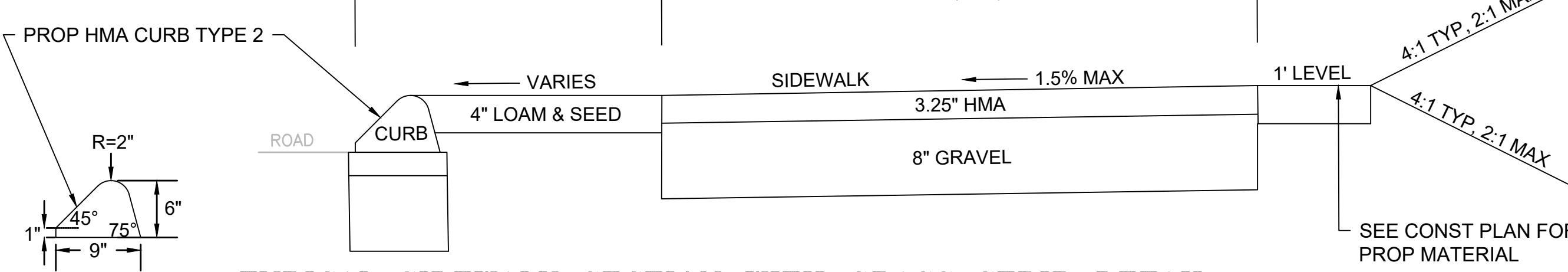
### GRANITE CURB SETTING DETAIL

NOT TO SCALE



### TYPICAL SIDEWALK SECTION ADJACENT TO ROADWAY DETAIL

NOT TO SCALE



### TYPICAL SIDEWALK SECTION WITH GRASS STRIP DETAIL

NOT TO SCALE

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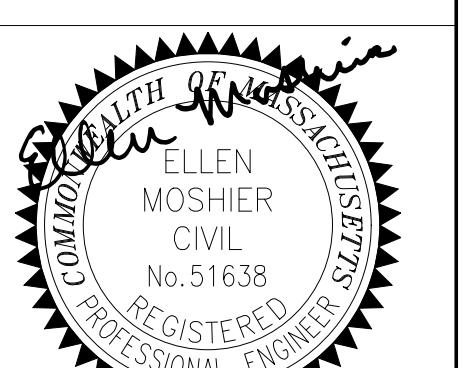
Designed By:	Drawn By:	Checked By:
DC/JB	DC/JB	JGM

Issue Date: 06-14-2022 Project No: 71414 Scale: NTS

Drawing No.: 13 OF 20



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LINCOLN STREET  
SIDEWALK  
PROJECT

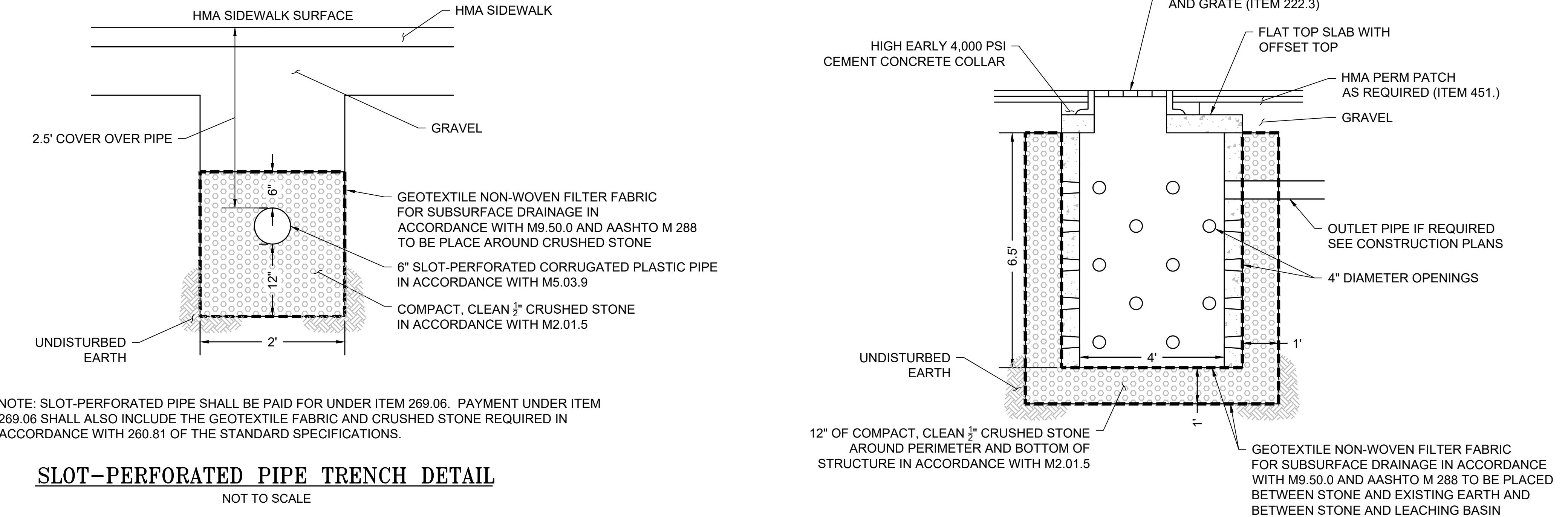


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## CONSTRUCTION DETAILS - 2

### PAVEMENT NOTES

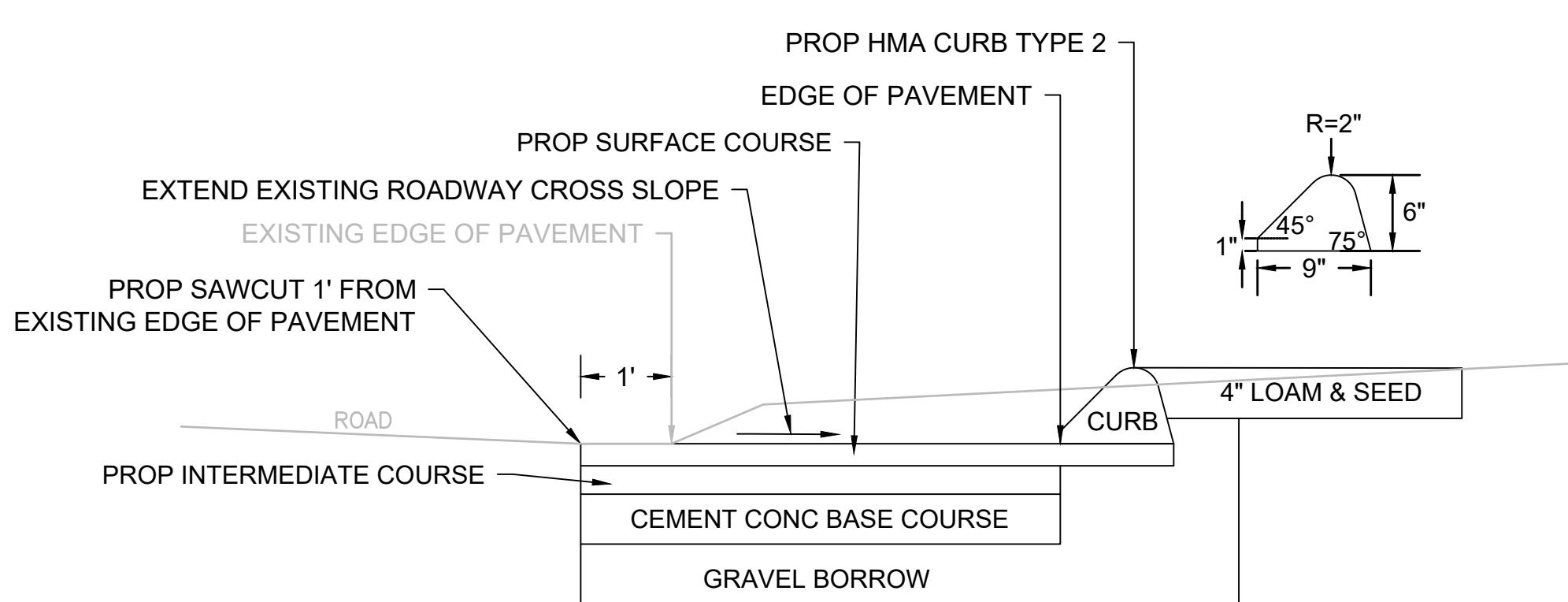
- PROPOSED FULL DEPTH PERMANENT TRENCH PATCH**  
3" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0) OVER  
3" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0) OVER  
12" GRAVEL BORROW TYPE b
- PROPOSED TEMPORARY TRENCH PATCH**  
3" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0) (ITEM #472) OVER  
8" GRAVEL BORROW TYPE b OVER COMPACTED TRENCH BACKFILL
- PROPOSED FULL DEPTH PAVEMENT WIDENING**  
1-1/2" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER  
6" CEMENT CONCRETE BASE COURSE OVER  
8" GRAVEL BORROW TYPE b
- PROPOSED HOT MIX ASPHALT DRIVEWAYS**  
1-1/2" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
2-1/2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER  
8" GRAVEL BORROW TYPE b
- PROPOSED HOT MIX ASPHALT SIDEWALK**  
1.25" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
2.00" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER  
8" GRAVEL BORROW - TYPE b
- PROPOSED GRAVEL DRIVEWAY**  
12" GRAVEL BORROW TYPE b OVER  
COMPACTED SUBGRADE
- PROPOSED CEMENT CONCRETE PEDESTRIAN CURB RAMP / SIDEWALK**  
6" CEMENT CONCRETE OVER  
8" GRAVEL BORROW - TYPE b



### NOTES:

TACK COAT APPLICATION RATES FOR SPECIFIC SURFACE CONDITIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- ON A NEW HMA SURFACE, NOT OPENED TO TRAFFIC, THE EMULSION APPLICATION RATE SHALL EQUAL 0.06 TO 0.08 GALLONS PER SQUARE YARD
- ON AN EXISTING TIGHT SMOOTH PAVEMENT THE EMULSION APPLICATION RATE SHALL EQUAL 0.06 TO 0.08 GALLONS PER SQUARE YARD
- ON A MILLED SURFACE THE EMULSION APPLICATION RATE SHALL EQUAL 0.07 TO 0.09 GALLONS PER SQUARE YARD
- ON CEMENT CONCRETE BASE COURSE THE EMULSION APPLICATION RATE SHALL BE EQUAL TO SPRAY APPLICATION FOR ADJACENT SURFACE
- ON NEW HMA PATCHES THE EMULSION APPLICATION RATE SHALL EQUAL 0.07 TO 0.09 GALLONS PER SQUARE YARD



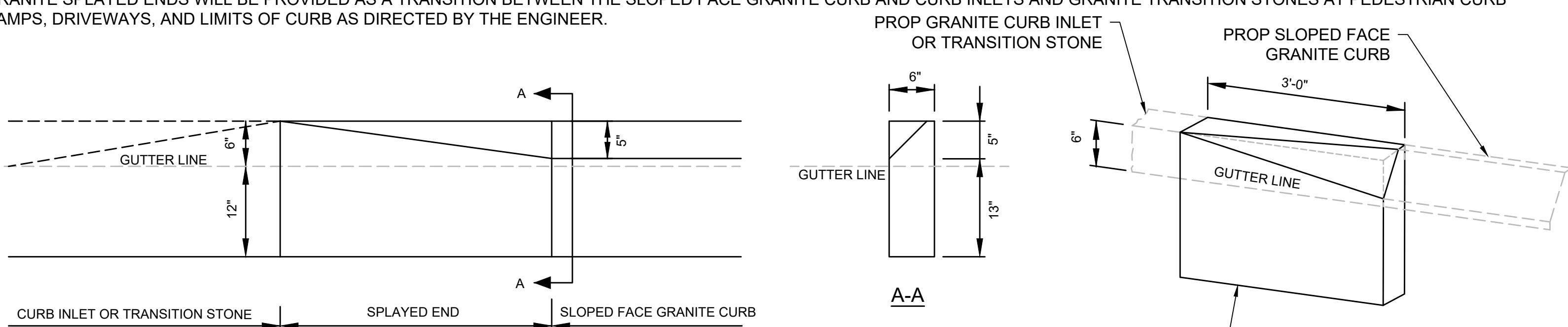
### HOT MIX ASPHALT CURB TYPE 2 ADJACENT TO FULL DEPTH PAVEMENT WIDENING

NOT TO SCALE

### ADD-ALTERNATIVE DETAILS

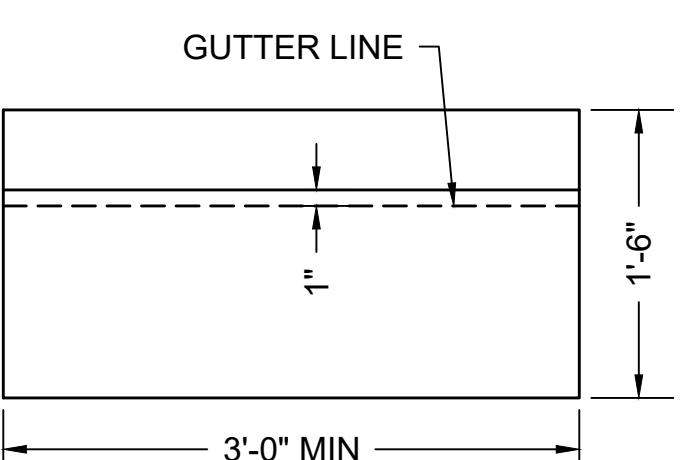
#### ADD-ALTERNATIVE NOTES:

1. SLOPED FACE GRANITE CURB, GRANITE CURB TYPE VA4 - SPLAYED END, AND GRANITE TRANSITION CURBS FOR PEDESTRIAN RAMPS STRAIGHT AND CURVED ARE INCLUDED AS AN ADD-ALTERNATIVE IN PLACE OF THE HMA CURB TYPE 2 AND TYPE 3 AND/OR AS DIRECTED BY THE ENGINEER.
2. SLOPED FACE GRANITE CURB, SPLAYED ENDS, AND GRANITE TRANSITION CURBS WILL REPLACE AREAS OF PROPOSED HMA CURB TYPE 2, HMA CURB TYPE 3, AND HMA TRANSITIONS CURBS ALONG THE FOLLOWING SECTIONS OF PROPOSED SIDEWALK:  
- LINCOLN STREET, STATION 102+21 TO STATION 104+78 LEFT  
- MIDDLE STREET, STATION 20+71 LEFT TO LINCOLN STREET STATION 121+15 RIGHT  
- LINCOLN STREET, STATION 126+29 TO STATION 128+24 RIGHT
3. GRANITE SPLAYED ENDS WILL BE PROVIDED AS A TRANSITION BETWEEN THE SLOPED FACE GRANITE CURB AND CURB INLETS AND GRANITE TRANSITION STONES AT PEDESTRIAN CURB RAMPS, DRIVEWAYS, AND LIMITS OF CURB AS DIRECTED BY THE ENGINEER.



### GRANITE CURB TYPE VA4 - SPLAYED END DETAIL (TRANSITION FROM CURB INLET & TRANSITION STONES TO SLOPED FACE GRANITE CURB)

NOT TO SCALE



#### NOTES:

1. TOP SURFACE AND SLOPED SURFACE TO BE DRESSED BY SAW. REMAINDER TO BE QUARRY SPLIT.
2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR PIECES TO BE 3'-0".
3. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.

### SLOPED FACE GRANITE CURB DETAIL

NOT TO SCALE

### HOT MIX ASPHALT CURB TYPE 3 ADJACENT TO EXISTING ROADWAY

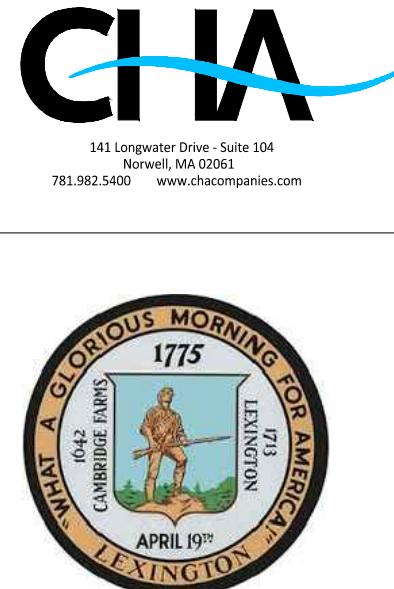
NOT TO SCALE

No.	Submittal / Revision	App'd	By	Date
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3	PRELIM			03/02/22
4	PRELIM - REV 1			03/09/22
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6	FINAL REV 1			06/14/22

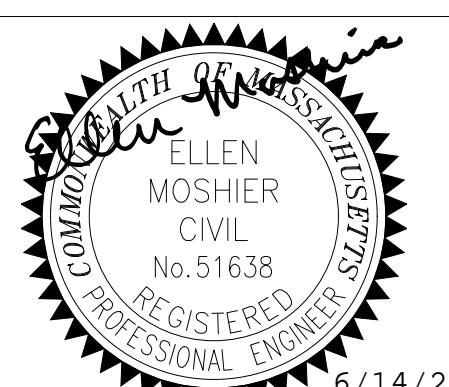
Designed By: DC/JB Drawn By: DC/JB Checked By: JGM

Issue Date: 06-14-2022 Project No: 71414 Scale: NTS

Drawing No.: 14 OF 20



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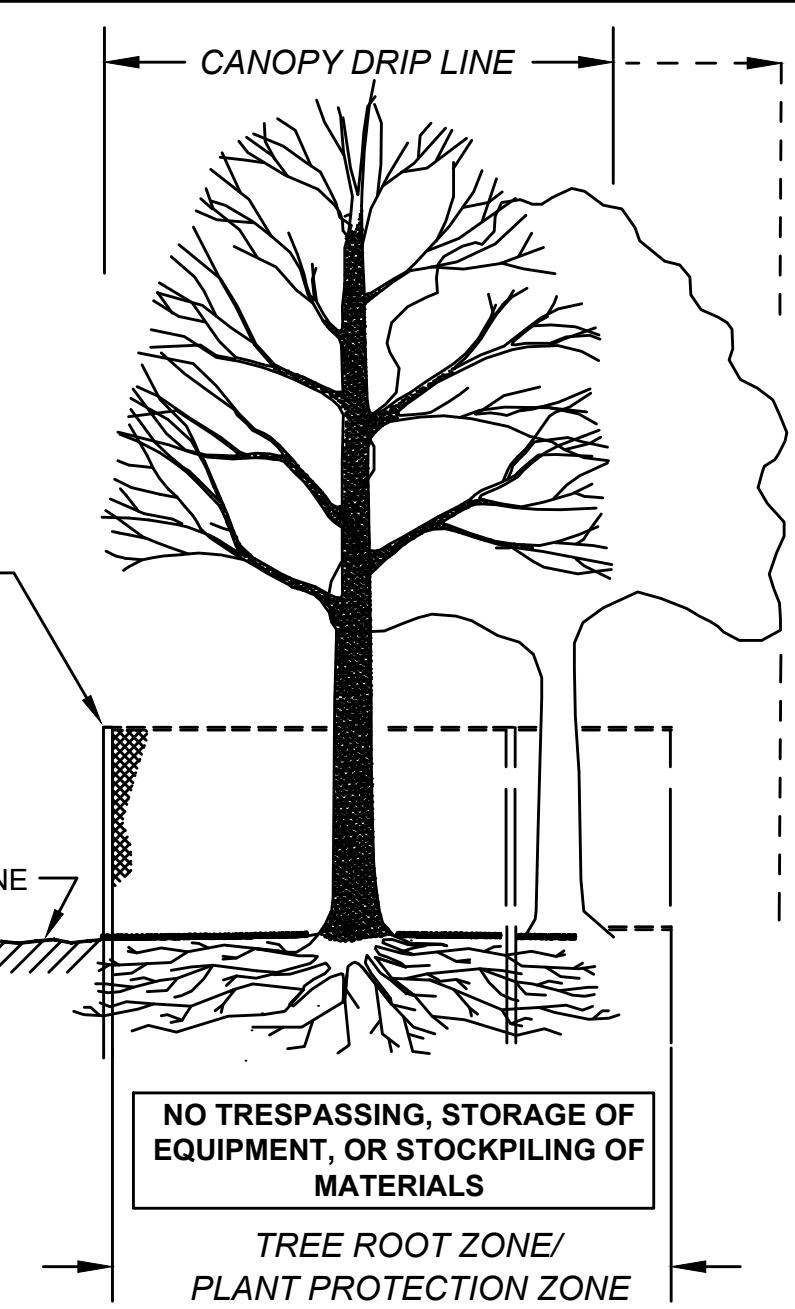
### CONSTRUCTION DETAILS - 3

No.	Submittal / Revision	App'd	By	Date
1	CONCEPT			10/22/21
2	CONCEPT - REV 1			01/05/22
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4	PRELIM - REV 1			03/09/22
5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

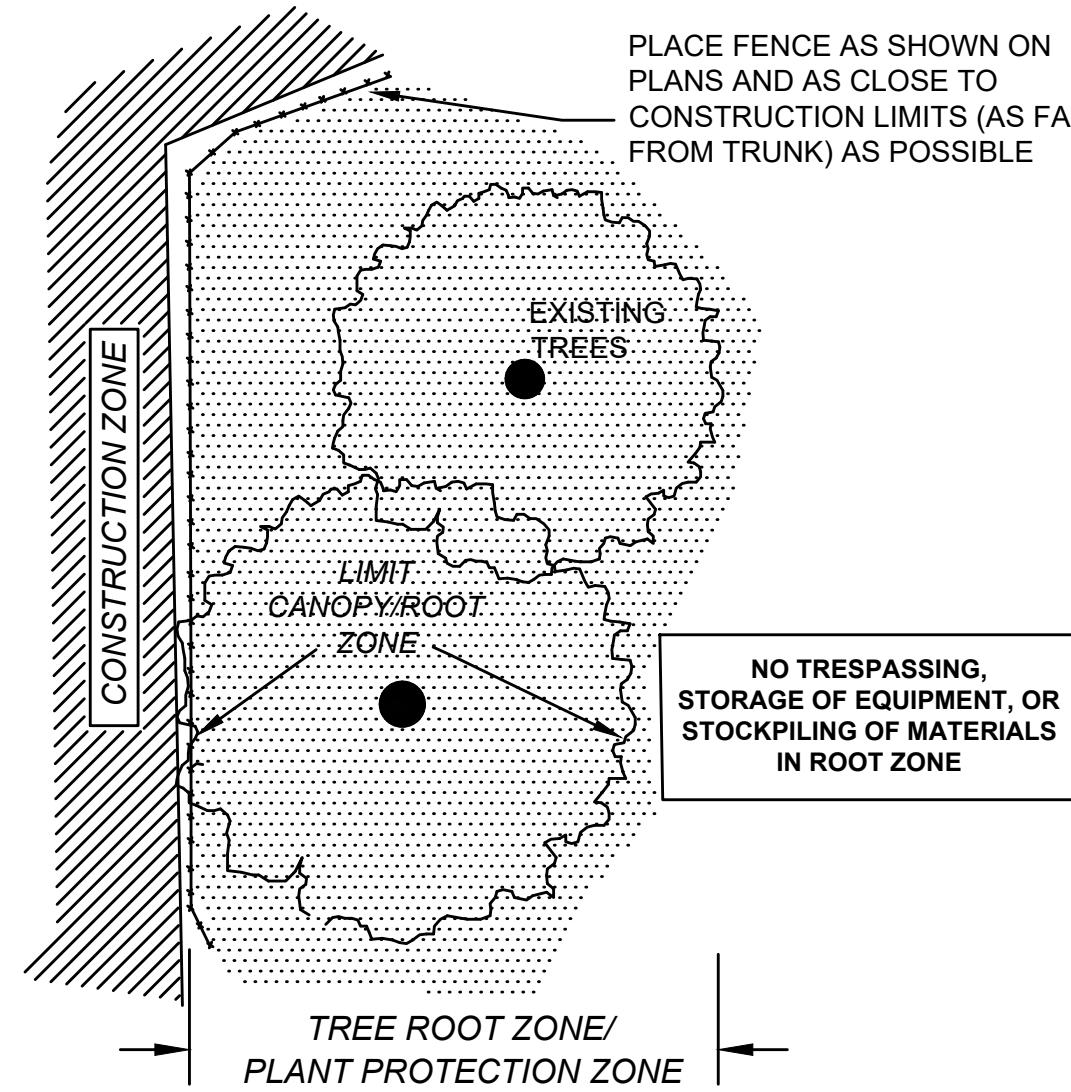
Designed By: DC/JB Drawn By: DC/JB Checked By: JGM

Issue Date: 06-14-2022 Project No.: 71414 Scale: NTS

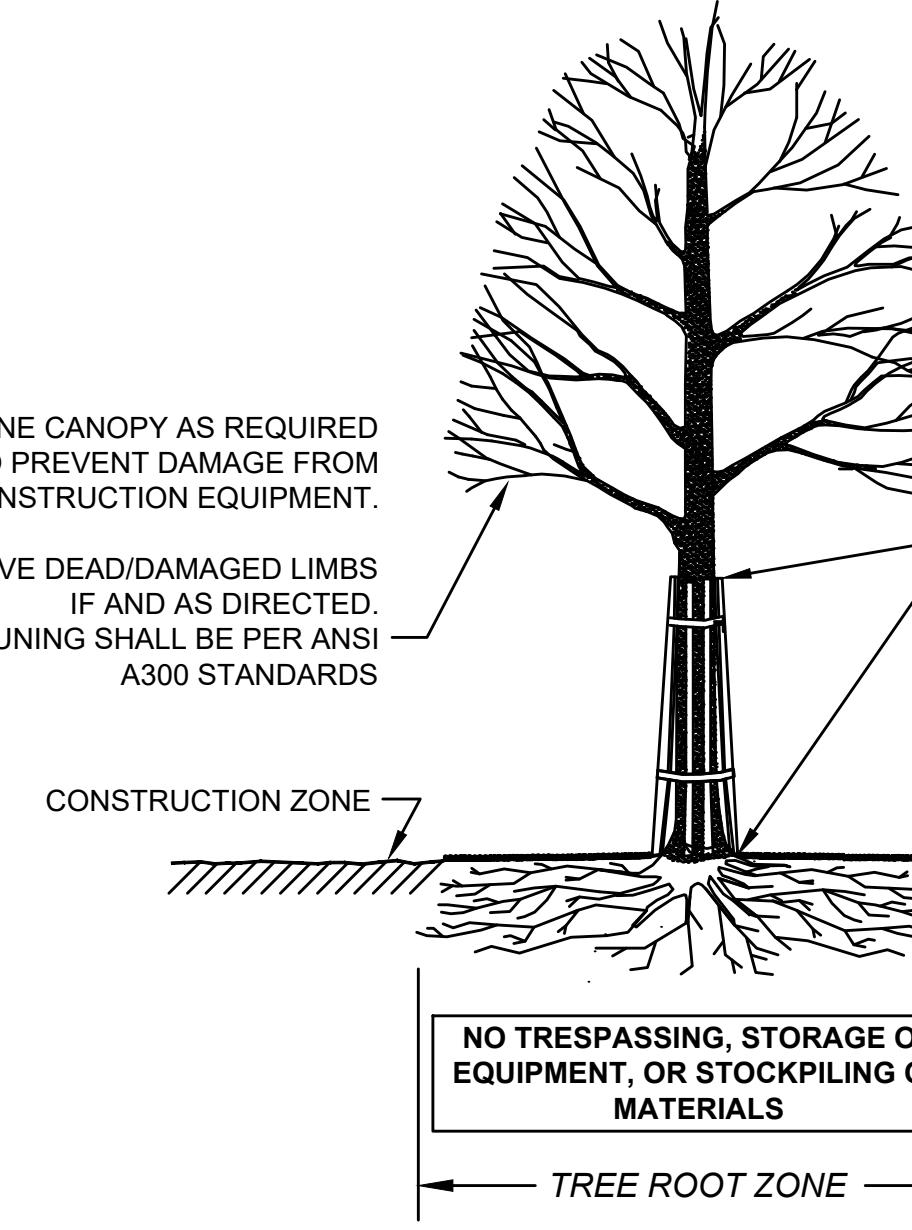
Drawing No.: 15 OF 20



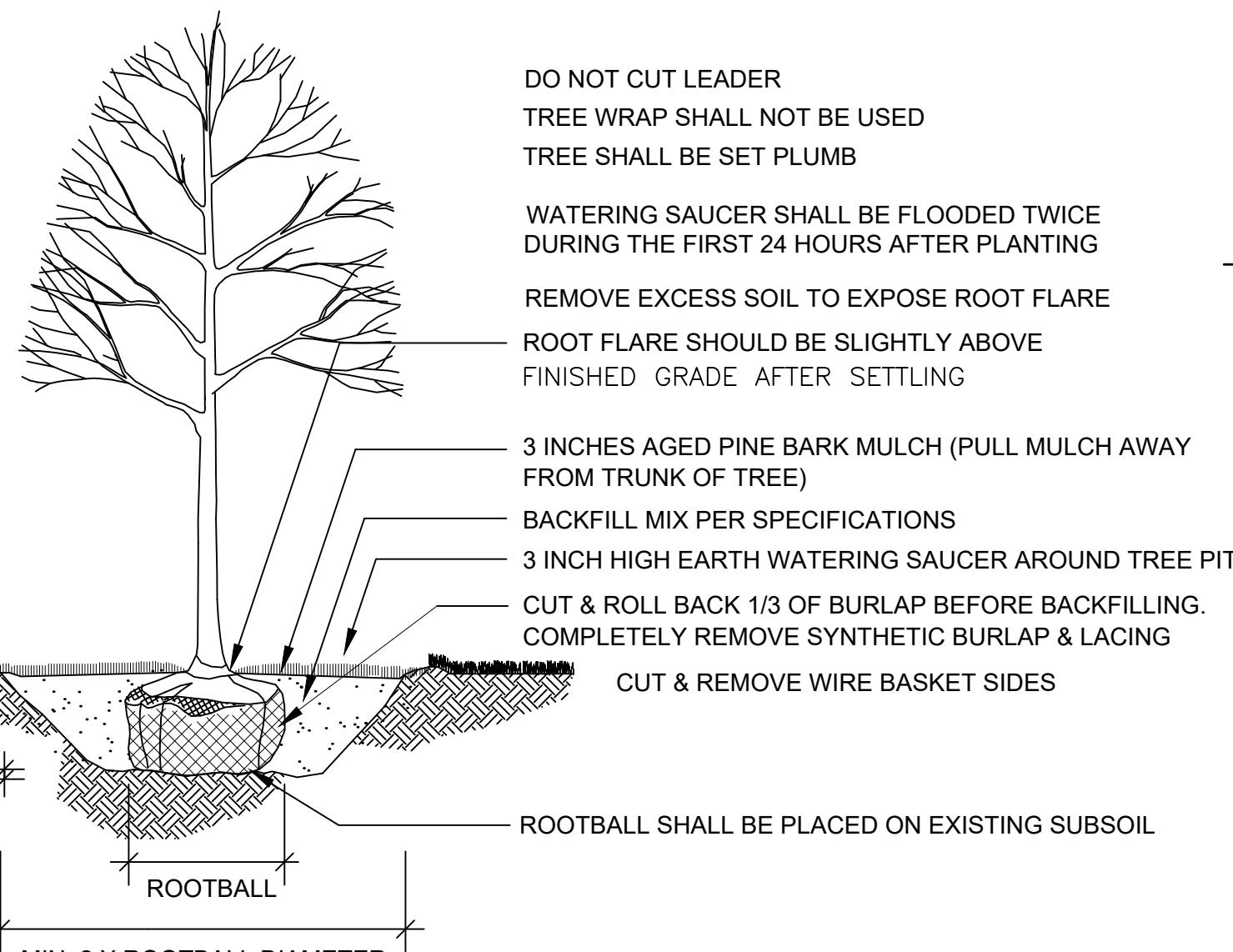
SECTION - FENCE PROTECTION OF ROOT ZONE



PLAN VIEW - FENCE PROTECTION OF ROOT ZONE

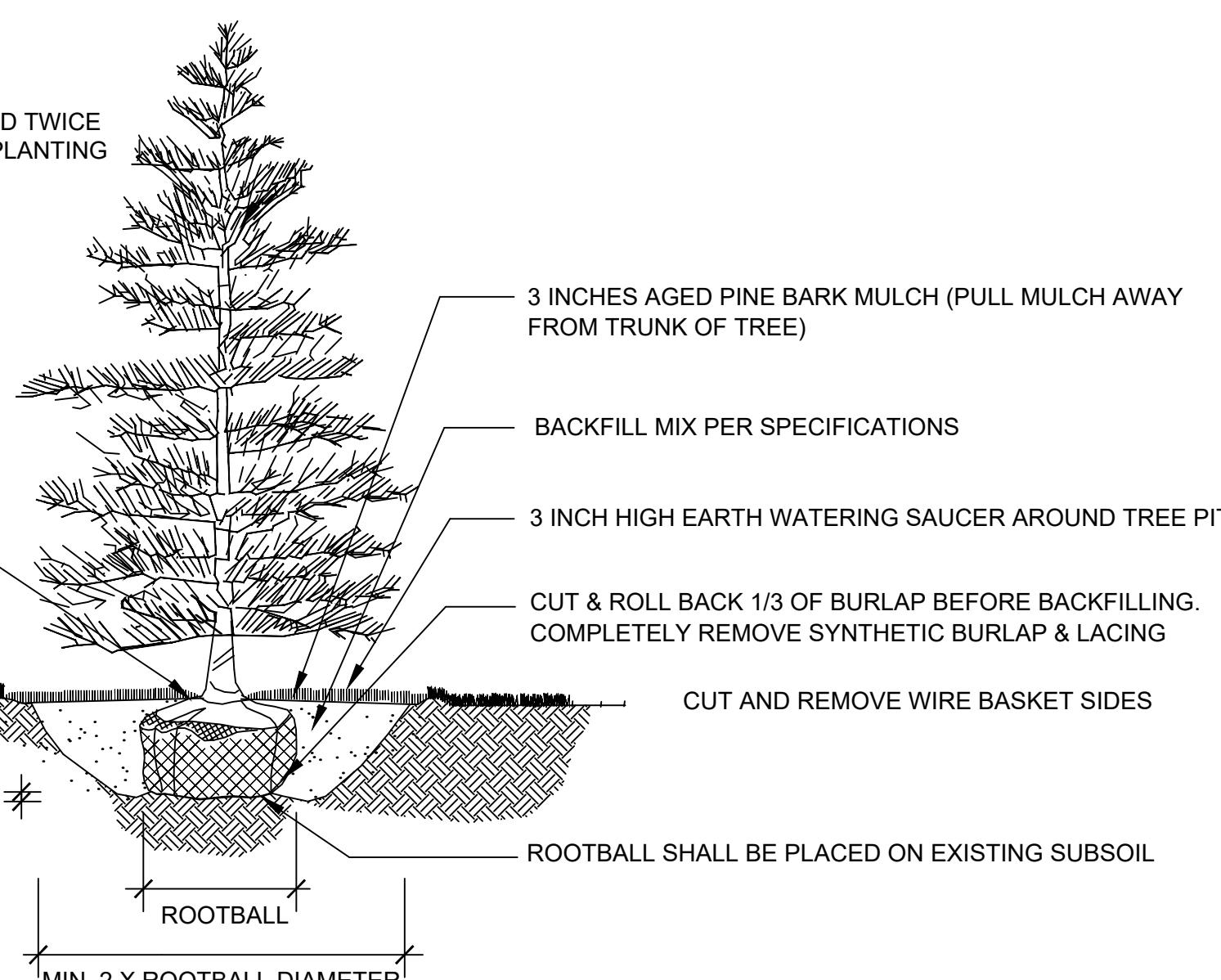


SECTION - TRUNK ARMORING & PRUNING



### DECIDUOUS TREE PLANTING

NOT TO SCALE

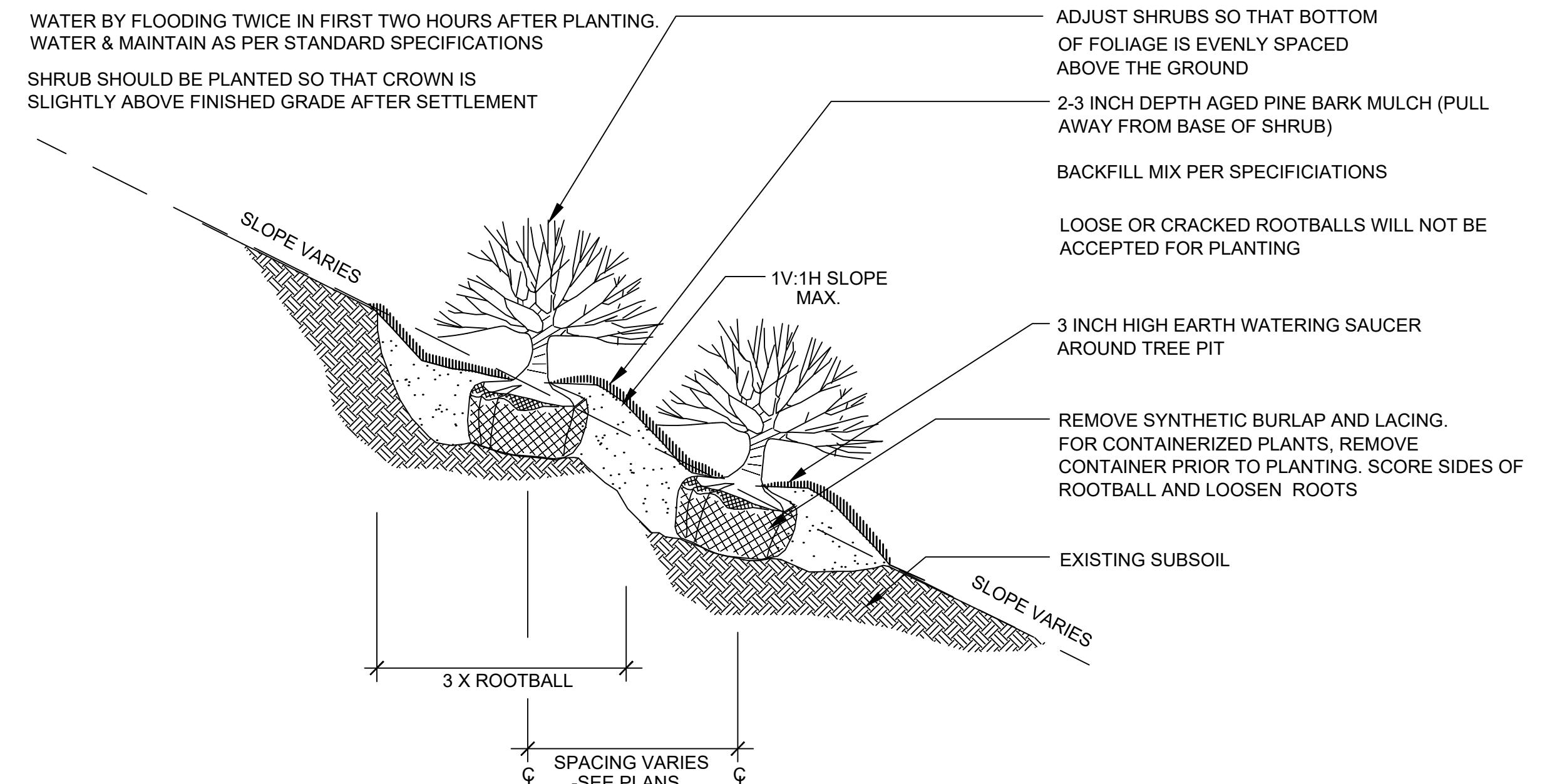


### EVERGREEN TREE PLANTING

NOT TO SCALE

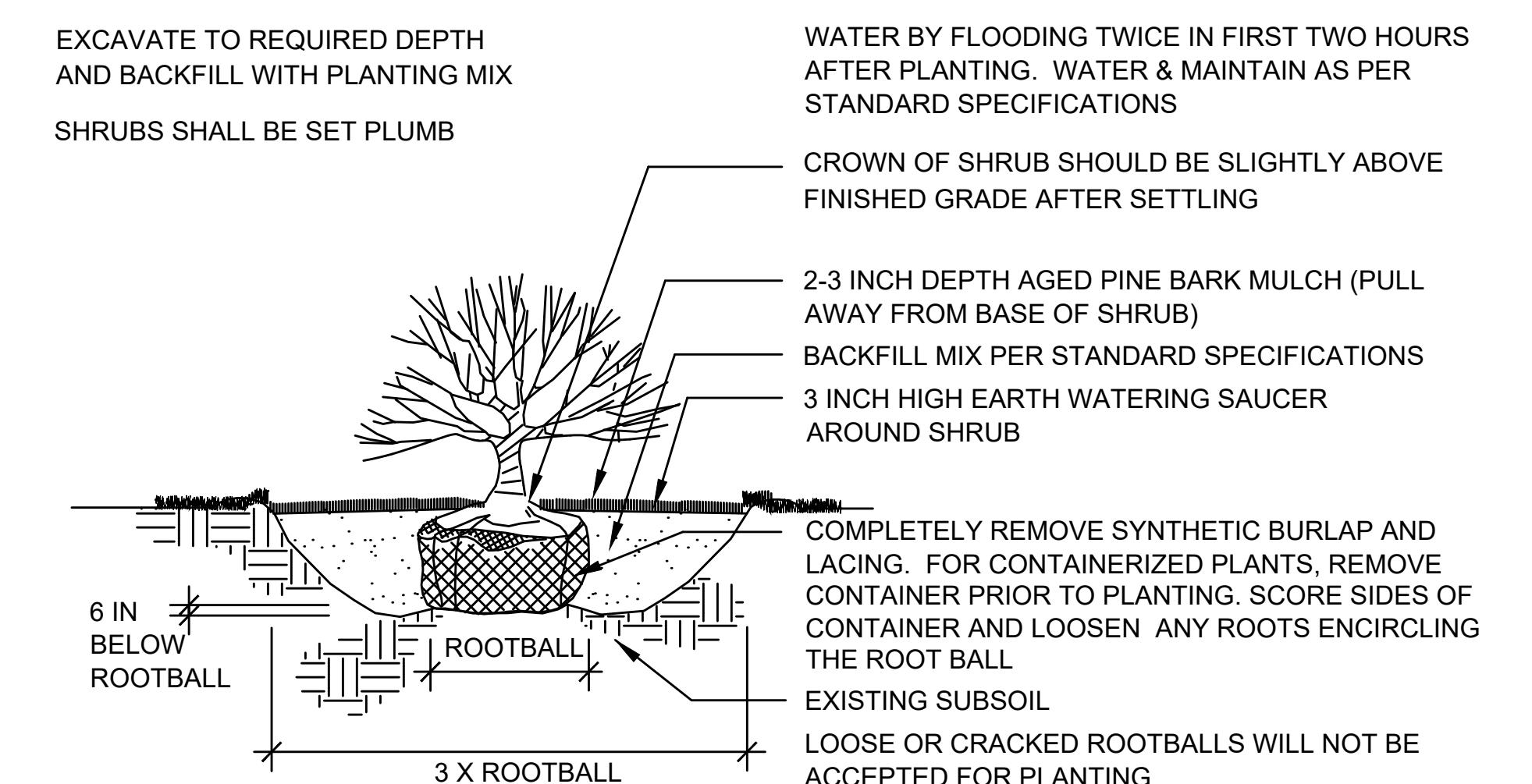
### TREE PROTECTION DETAIL

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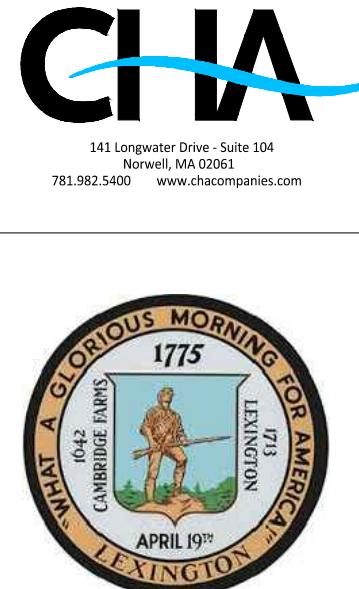
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NOT TO SCALE

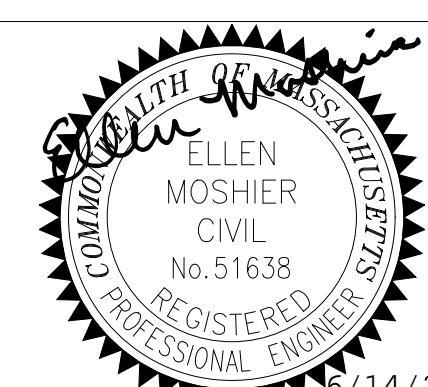


### SHRUB PLANTING

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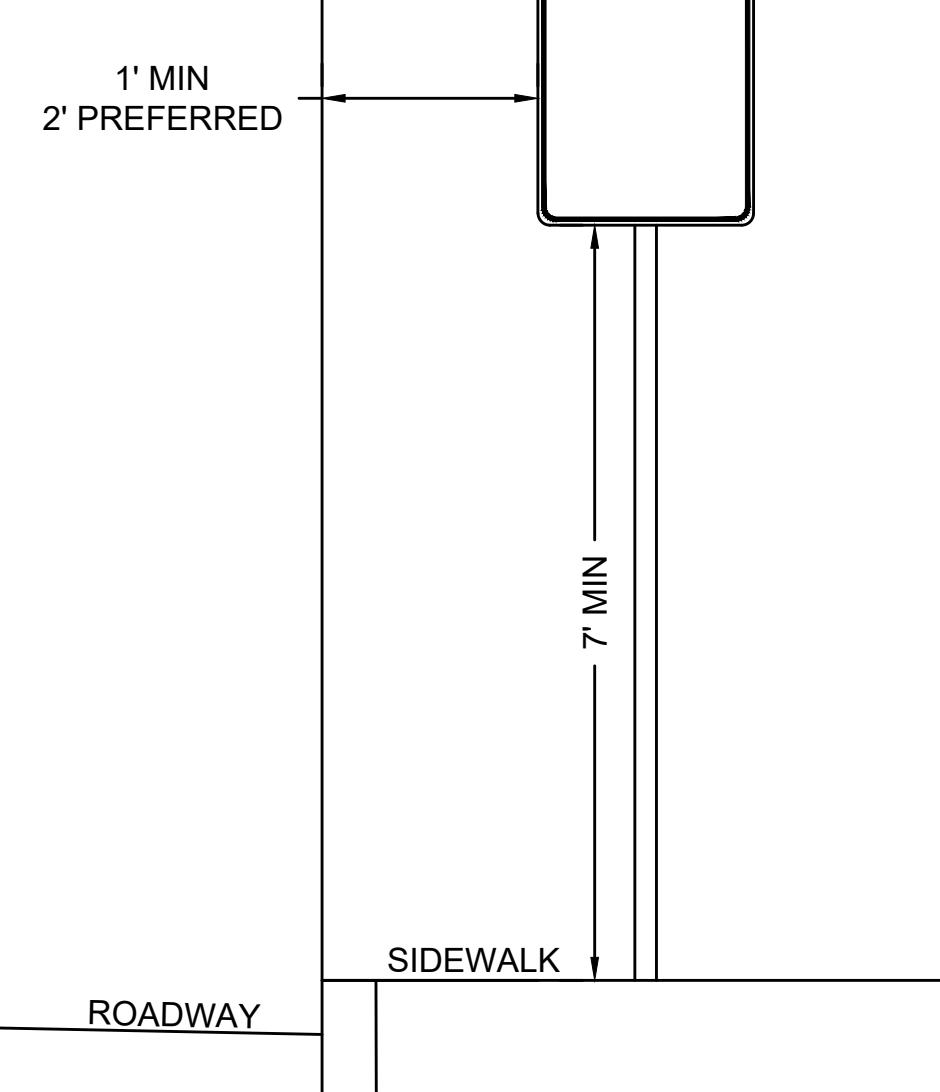


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#### CONSTRUCTION DETAILS - 4



#### SIGN HEIGHT & LATERAL OFFSET DETAIL

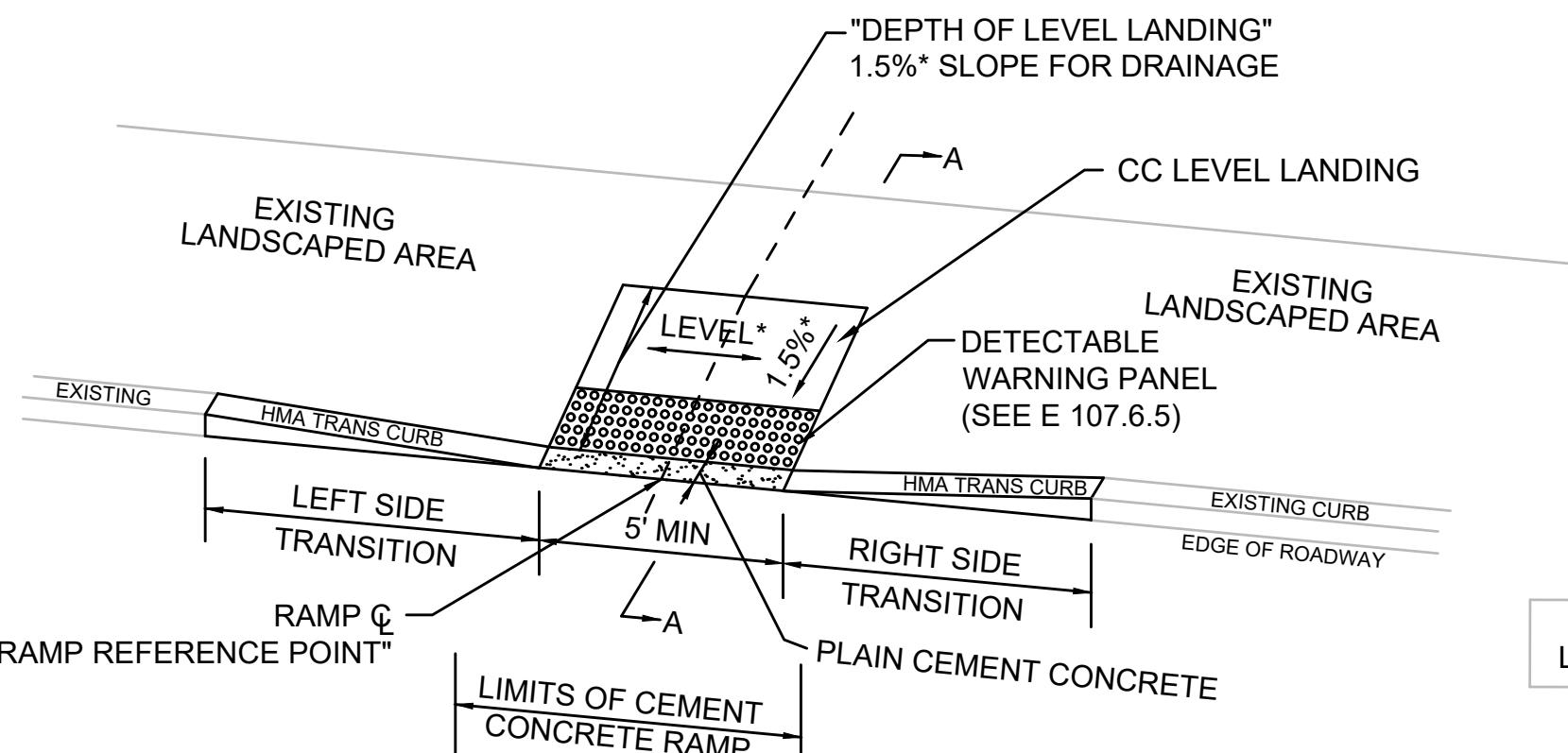
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##### GENERAL PEDESTRIAN CURB RAMP NOTES:

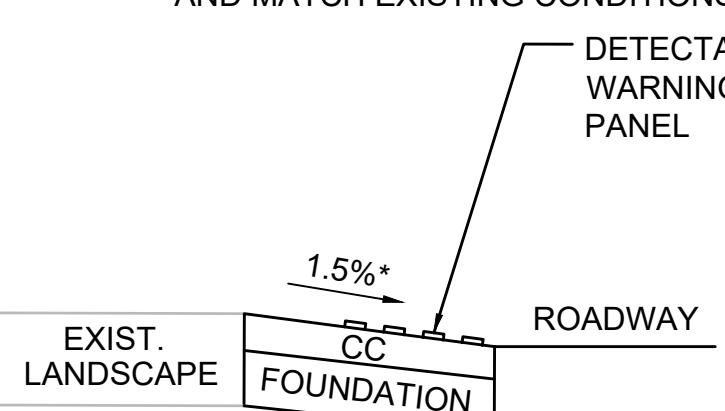
- ALL PEDESTRIAN CURB RAMPS SHALL CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (AAB), THE AMERICAN WITH DISABILITIES ACT (ADA) AND THE LATEST MASSDOT HIGHWAY DIVISION PEDESTRIAN CURB RAMP STANDARDS.
- THE LOCATIONS OF THE PROPOSED PEDESTRIAN CURB RAMPS ARE SHOWN ON THE CONSTRUCTION PLANS. ADDITIONAL TYPICAL DETAILS AND PEDESTRIAN CURB RAMP DATA TABLE ARE SHOWN IN THE CONSTRUCTION DETAILS.
- PROPOSED PEDESTRIAN CURB RAMP SLOPES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE PLACING OF CONCRETE, AND BE ADJUSTED, IF NECESSARY, TO CONFORM TO THE LATEST ADAAG/ PROWAG/ MAAB STANDARDS, AS DIRECTED BY THE ENGINEER.
- ALL PROPOSED CURB FOR PEDESTRIAN CURB RAMP TRANSITIONS SHALL BE CUT AND TRANSITIONED AS NECESSARY TO PROVIDE THE CORRECT TRANSITION LENGTHS FOR EACH PEDESTRIAN CURB RAMP, AS SHOWN ON THE PEDESTRIAN CURB RAMP DETAILS OR AS DIRECTED BY THE ENGINEER. ANY EXISTING CURB INLETS IN AREAS OF NEW PEDESTRIAN CURB RAMP TRANSITIONS SHALL BE REMOVED AND REPLACED WITH APPROPRIATE TRANSITION CURB AS DIRECTED BY THE ENGINEER.
- IN NO CASE, EXCEPT FOR MAXIMUM LENGTH HIGH SIDE TRANSITIONS (GUTTER SLOPES GREATER THAN 4%) SHALL ANY TRANSITION SLOPE OF ANY PEDESTRIAN CURB RAMP EXCEED 7.5%.
- WHEN PLACEMENT OF THE PROPOSED PEDESTRIAN CURB RAMP IS SUCH THAT IT IS UNAVOIDABLE FOR EXISTING STRUCTURES, THAT CANNOT BE MOVED OR RESET, TO BE WITHIN THE PEDESTRIAN CURB RAMP, EXTREME CARE SHALL BE TAKEN SUCH THAT THE EXISTING STRUCTURE IS WITHIN THE TRANSITIONS ONLY, IF POSSIBLE, WHEN THE NEW PEDESTRIAN CURB RAMP IS PLACED AND THAT A 36 INCH WIDE (MIN) CLEAR PATH OF TRAVEL EXISTS BETWEEN THE EXISTING STRUCTURE AND EITHER THE CURBLINE OR THE BACK OF THE SIDEWALK, AS DIRECTED BY THE ENGINEER.
- IN RARE INSTANCES WHERE AN EXISTING MANHOLE, HANDHOLE OR OTHER EXISTING "SURFACE" TYPE STRUCTURE WHICH CANNOT BE REMOVED OR RESET, IS WITHIN THE ACTUAL PEDESTRIAN CURB RAMP PATH, THE STRUCTURE SHALL BE CAREFULLY ADJUSTED SUCH THAT THE TOPMOST SURFACE OR THE STRUCTURE COVER SHALL BE FLUSH WITH THE NEW RAMP SURFACE AND SHALL MATCH THE SLOPE OF THE NEW PEDESTRIAN CURB RAMP EXACTLY, AS DIRECTED BY THE ENGINEER.
- ALL PEDESTRIAN CURB RAMPS WITHIN THE PROJECT LIMITS SHALL HAVE DETECTABLE WARNING PANELS INSTALLED IN ACCORDANCE WITH MASSDOT STANDARD DRAWING E 107.6.5R
- TOLERANCE FOR CONSTRUCTION IS +/- 0.5%.

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE & NUMBER REQUIRED	UNIT AREA (SF)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACKGROUND	LEGEND	BORDER			
R1-1	30"	30"	STOP	SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS			2	RED	WHITE	WHITE	P5 2	6.25	12.50
W11-2	30"	30"	WALK				16	FLUORESCENT YELLOW/GREEN	BLACK	BLACK	P5 8"	6.25	100
W16-7pL	24"	12"	WALK				8	FLUORESCENT YELLOW/GREEN	BLACK	BLACK	MOUNT W/ W11-2	2.00	16
W16-7pR	24"	12"	WALK				8	FLUORESCENT YELLOW/GREEN	BLACK	BLACK	MOUNT W/ W11-2	2.00	16

\*INSTALL MATCHING FLUORESCENT YELLOW/GREEN REFLECTORIZED STRIP ON BOTH SIDES OF THE SIGN POST



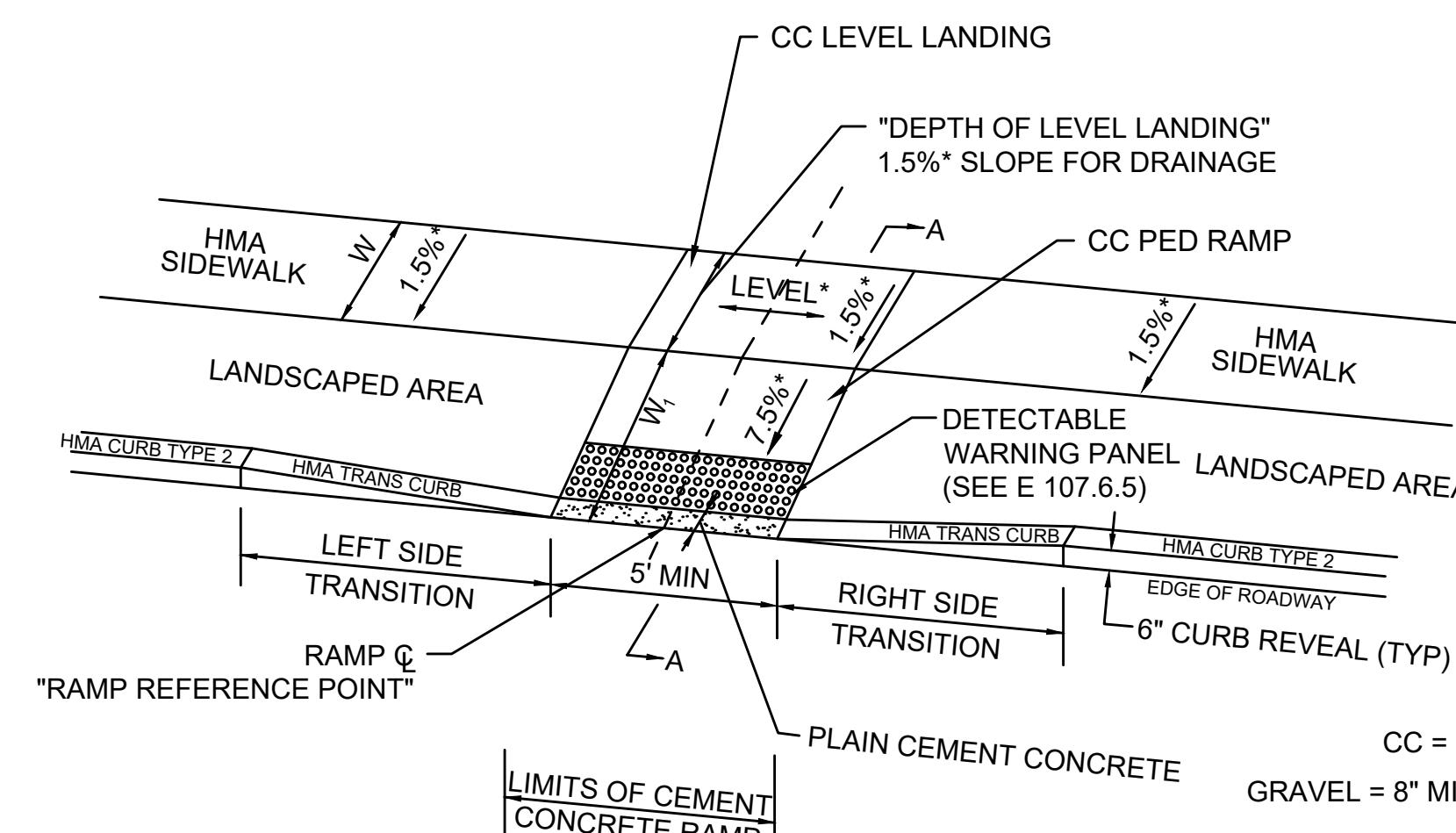
NOTES:  
\*CONSTRUCTION TOLERANCE ±0.5%  
\*\* THE LEFT AND RIGHT TRANSITIONS SHALL MEET AND MATCH EXISTING CONDITIONS



PCR #	ALIGNMENT	RAMP REFERENCE POINT		WIDTH OF RAMP OPENING MIN 5.00'	DEPTH OF LEVEL LANDING	TRANSITION LENGTH	
		STATION	OFFSET			LEFT**	RIGHT**
15	WESTON ST	11+46.81	19.54' LT	5.00'	5.00'	2'-0"	6'-0"

#### PCR #15 DETAIL

N.T.S.



NOTES:  
\*CONSTRUCTION TOLERANCE ±0.5%

PCR #	ALIGNMENT	RAMP REFERENCE POINT		LENGTH OF PRIMARY RAMP (W1)	WIDTH OF SIDEWALK (W)	WIDTH OF RAMP OPENING MIN 5.00'	DEPTH OF LEVEL LANDING MIN 4.0'	TRANSITION LENGTH	
		STATION	OFFSET					LEFT	RIGHT
8	LINCOLN ST	107+01.34	9.84' RT	6.92'	5.00'	5.00'	5.00'	0'-0"	6'-0"
9	LINCOLN ST	107+04.89	12.92' LT	6.36'	5.00'	5.00'	5.00'	6'-0"	6'-0"
13	BIRCH HILL LN	30+30.36	14.86' RT	3.50'	5.00'	5.00'	4.00'	6'-0"	6'-0"

#### PEDESTRIAN CURB RAMP WITH LANDSCAPING STRIP & SIDEWALK TRANSITIONS

N.T.S.

#### PEDESTRIAN CURB RAMP WITH LANDSCAPING STRIP

N.T.S.

No.	Submittal / Revision	App'd	By	Date
1	CONCEPT			10/22/21
2	CONCEPT - REV 1			01/05/22
3	PRELIM			03/02/22
4	PRELIM - REV 1			03/09/22
5	FINAL			06/02/22
6	FINAL REV 1			06/14/22

Designed By: DC/JB Drawn By: DC/JB Checked By: JGM

Issue Date: 06-14-2022 Project No: 71414 Scale: NTS

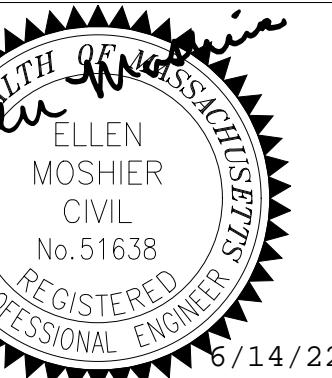
Drawing No.: 16 OF 20



**TOWN OF  
LEXINGTON,  
MASSACHUSETTS**

**HIGHWAY  
DEPARTMENT**

**LINCOLN STREET  
SIDEWALK  
PROJECT**



INATION OF LAW FOR ANY  
UNLESS THEY ARE ACTING  
HE DIRECTION OF A LICENSED  
ONAL ENGINEER, ARCHITECT,  
PE ARCHITECT OR LAND  
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RING ENGINEER, ARCHITECT,  
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RE, THE DATE OF SUCH  
ON, AND A SPECIFIC  
ITION OF THE ALTERATION.

# **CONSTRUCTION DETAILS - 5**

No.	Submittal / Revision	App'd.	By	Date
1	CONCEPT			10/22/2
2	CONCEPT - REV 1			01/05/2
3	PRELIM			03/02/2
4	PRELIM - REV 1			03/09/2
5	FINAL			06/02/2
6	FINAL REV 1			06/14/2

Designed By:	Drawn By:	Checked By:
DC/JB	DC/JB	JGM
Date:	Project No.:	Serial No.:

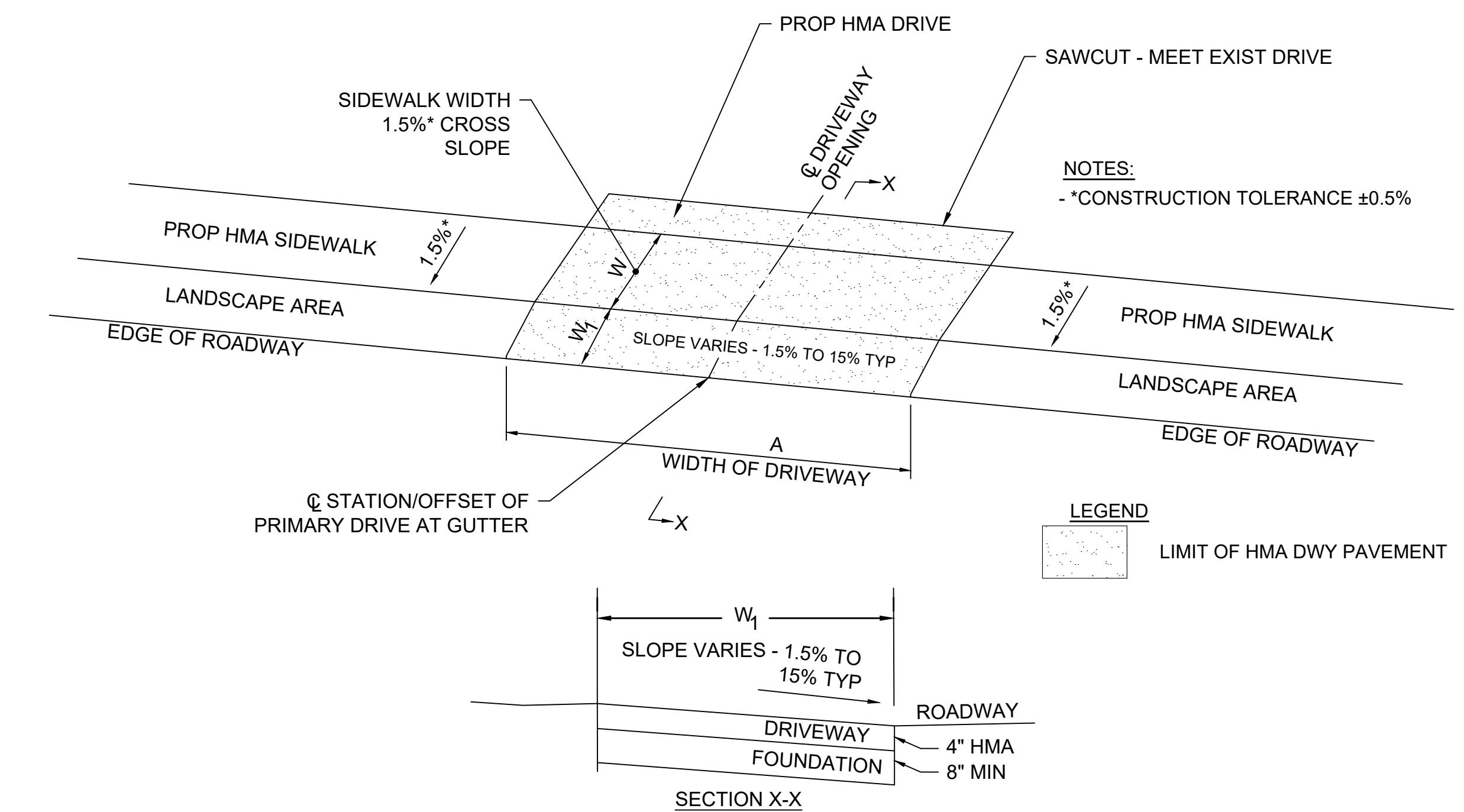
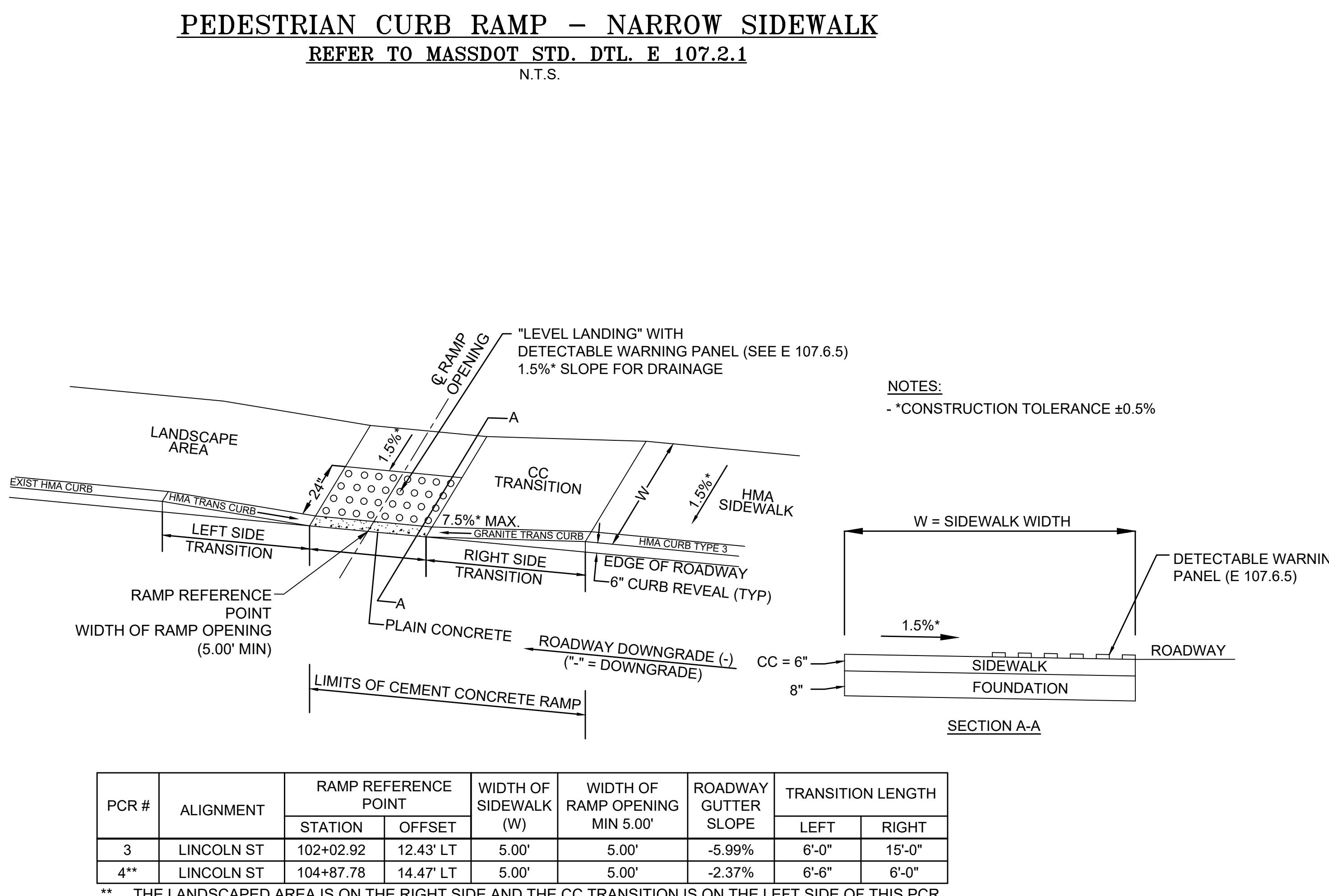
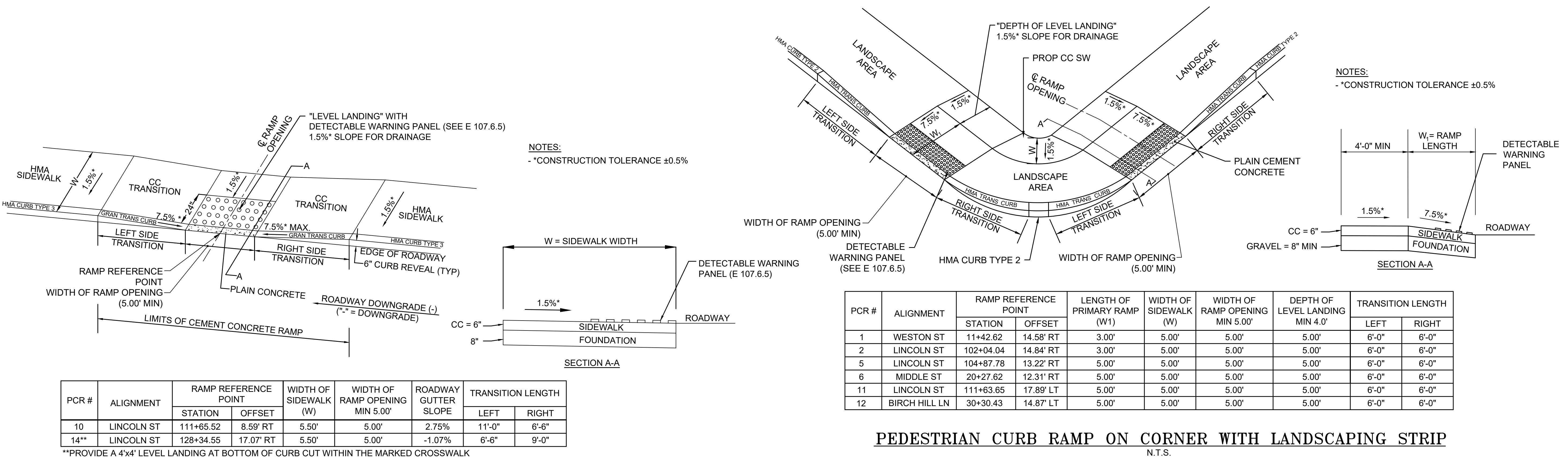
Issue Date: Project No: Scale:  
06-14-2022 71414 NTS

Drawing No.:

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WY #	ALIGNMENT	RAMP REFERENCE POINT		WIDTH OF SIDEWALK (W)	LENGTH OF PRIMARY RAMP (W1)	WIDTH OF DRIVEWAY (A)
		STATION	OFFSET			
5	LINCOLN ST	106+66.05	9.25' RT	5.0'	6.50'	20.25'
6*	LINCOLN ST	107+18.10	10.96' RT	5.0'	6.60'	18.61'
8	LINCOLN ST	118+80.81	13.60' RT	5.0'	12.13'	16.00'
9	LINCOLN ST	121+80.06	11.36' RT	5.0'	3.00'	20.14'
10**	LINCOLN ST	122+31.65	13.10' RT	5.0'	3.00'	16.39'
11**	LINCOLN ST	124+09.73	13.21' RT	5.0'	3.00'	15.74'
12**	LINCOLN ST	124+51.97	13.07' RT	5.0'	3.00'	22.90'
13**	LINCOLN ST	126+08.43	10.30' RT	5.0'	3.00'	16.00'

CONSTRUCTION OF THE PRIMARY DRIVEWAY RAMP IS NOT PROPOSED. EXISTING COBBLESTONES SHALL BE RETAINED.

\* THE CROSS-SLOPE OF PRIMARY RAMP (W1) OF DRIVEWAYS 10, 11, 12, AND 13 SHALL MATCH THE EXISTING CONDITIONS CROSS-SLOPE BUT SHALL NOT EXCEED 15%. THE MAXIMUM CROSS-SLOPE OF THE SIDEWALK SHALL BE 1.5% ±0.5%.

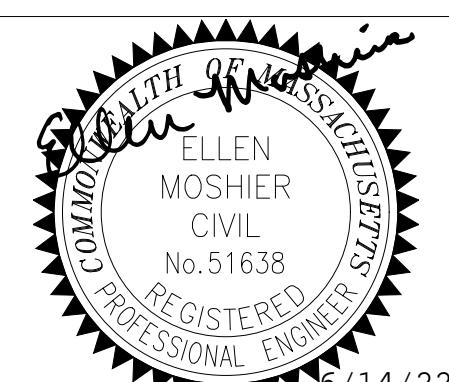
## HMA SIDEWALK THROUGH DRIVEWAY WITH LANDSCAPING STRIP

NOT TO SCALE



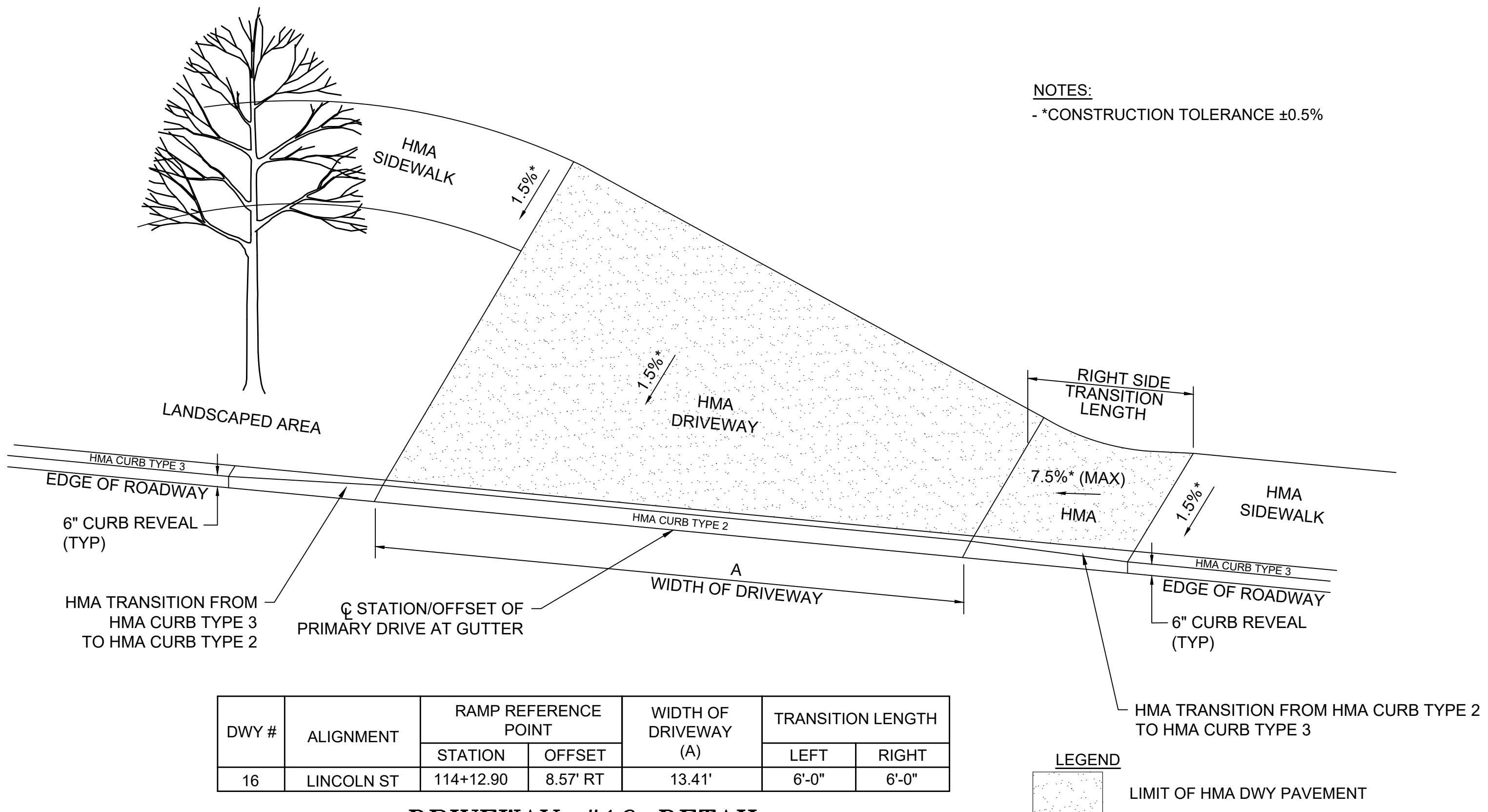
TOWN OF  
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MASSACHUSETTS  
HIGHWAY  
DEPARTMENT

LINCOLN STREET  
SIDEWALK  
PROJECT



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION AND SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR, TO PRACTICE IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE PERSON PRACTICING AS A PROFESSIONAL, LANDSCAPE ARCHITECT OR LAND SURVEYOR MUST SIGN THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF WHICH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

## CONSTRUCTION DETAILS - 6



### DRIVEWAY #16 DETAIL

NOT TO SCALE

DWY #	ALIGNMENT	RAMP REFERENCE POINT		WIDTH OF DRIVEWAY (A)	TRANSITION LENGTH
		STATION	OFFSET		
16	LINCOLN ST	114+12.90	8.57' RT	13.41'	6'-0"    6'-0"

LIMIT OF HMA DWY PAVEMENT

No.	Submittal / Revision	App'd	By	Date
1	CONCEPT			10/22/21
2	CONCEPT - REV 1			01/05/22
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4	PRELIM - REV 1			03/09/22
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6	FINAL REV 1			06/14/22

Designed By: DC/JB Drawn By: DC/JB Checked By: JGM

Issue Date: 06-14-2022 Project No: 71414 Scale: NTS



## GENERAL NOTES

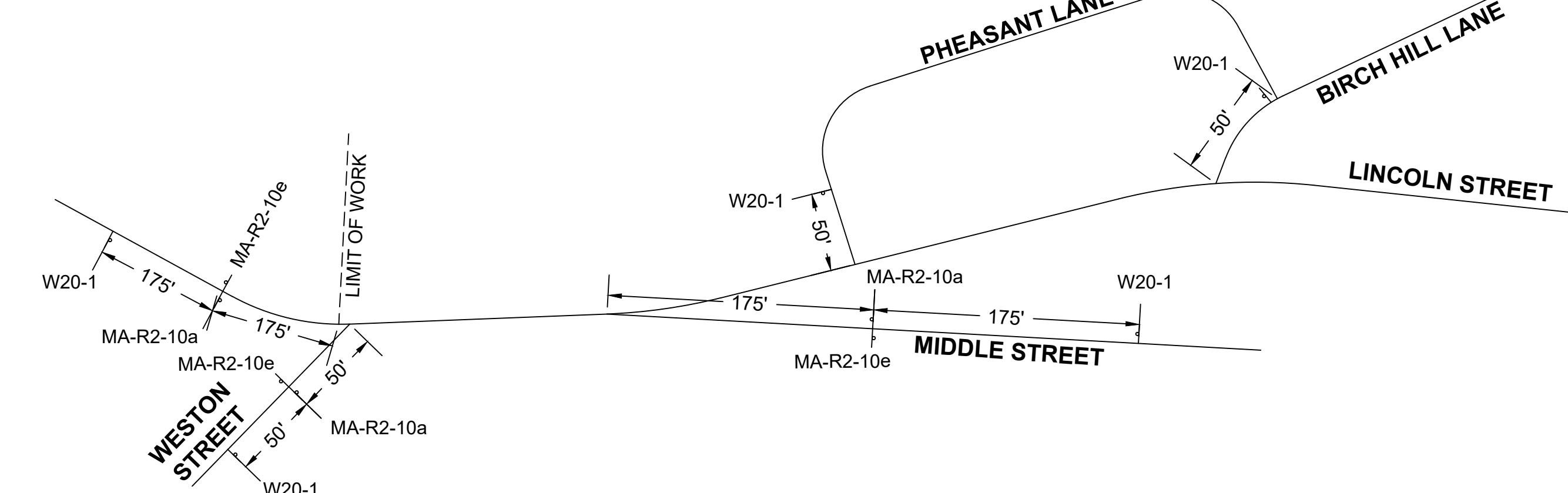
- ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL CONFORM WITH PART 6 OF THE LATEST EDITION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
- ALL CHANNELIZING DEVICES SHALL BE SET @ 25' O.C. MAX. UNLESS OTHERWISE NOTED OR ADJUSTED BY THE RESIDENT ENGINEER.
- ALL DRUMS SHALL BE APPROPRIATELY PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES. WORK MAY REQUIRE ADDITIONAL SIGNS, DRUMS AND OTHER TRAFFIC CONTROL DEVICES, GRADING AND TEMPORARY PAVEMENT FOR PASSAGE OF PEDESTRIAN, VEHICULAR AND EMERGENCY TRAFFIC THROUGH THE WORK AREAS, BOTH DURING AND AFTER WORK HOURS, TO MAINTAIN SUCH ACCESS.
- THE CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- THE CONTRACTOR SHALL NOTIFY THE TOWN OF LEXINGTON POLICE, FIRE, AND HIGHWAY DEPARTMENT AT LEAST 48 HOURS IN ADVANCE OF LANE CLOSURES.
- A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT DURING WORKING HOURS, TRAFFIC MAY BE REDUCED TO ONE LANE UNDER POLICE OR FLAGGER CONTROL FOR SHORT TIME PERIODS WHEN REQUIRED FOR THE WORK, AS SHOWN.
- GRADE SEPARATIONS IN EXCESS OF 2 INCHES DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF DRUMS.
- EXCAVATION EDGES IN EXCESS OF 4 INCHES DEEP SHALL BE PROTECTED DURING NON-WORKING HOURS BY BACKFILLING WITH A WEDGE OF GRAVEL OR SOIL COMPACTED TO A 4:1 SLOPE.
- 11' MINIMUM LANE WIDTHS SHALL BE MAINTAINED DURING CONSTRUCTION. IF THIS IS NOT POSSIBLE, LANE WIDTHS SHALL BE EQUAL TO OR WIDER THAN THE EXISTING CONDITION LANE WIDTHS.
- NON-ESSENTIAL TEMPORARY CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED DURING NON-WORKING HOURS.
- ADVISORY SPEED PLATES (W13-1) SHALL BE USED IF APPROPRIATE AND AS DIRECTED BY THE ENGINEER.
- ALL TEMPORARY PEDESTRIAN PATHWAYS SHALL COMPLY FULLY WITH ALL REQUIREMENTS OF THE MUTCD, ALL APPLICABLE MASS ARCHITECTURAL ACCESS BOARD (MAAB) REQUIREMENTS, ALL AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) REQUIREMENTS, AND THE MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS, SPECIFICALLY THE PEDESTRIAN DETAILS PED-1 THROUGH PED-8.
- CONTRACTOR SHALL MAINTAIN ADA-COMPLIANT PEDESTRIAN ACCESS AT ALL TIMES, SPECIFICALLY INCLUDING PEDESTRIAN GUIDANCE SYSTEMS AT WORK ZONES. ACCESS SHALL BE MAINTAINED ALONG ALL SIDEWALKS AND CROSSWALKS AND TO ALL ABUTTERS. ANY PEDESTRIAN DETOURS SHALL INCLUDE A FULLY ADA COMPLIANT PEDESTRIAN DETOUR ROUTE WITH PROPER BARRICADES, RAILINGS, RAMPS, AND SIGNAGE.

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	BACK-GROUND	COLOR	LEGEND	BORDER	NUMBER OF POSTS REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.								
MA-R2-10a	48"	36"		SEE MASSDOT STANDARD SIGN BOOK	6	FLUORESCENT ORANGE & WHITE	BLACK	BLACK	6	12.00	72.00			
MA-R2-10e	36"	48"		SEE MASSDOT STANDARD SIGN BOOK	6	FLUORESCENT ORANGE & WHITE	BLACK	BLACK	6	12.00	72.00			
MA-W20-7b	36"	36"		SEE MASSDOT STANDARD SIGN BOOK	4	FLUORESCENT ORANGE	BLACK	BLACK	4	9.00	36.00			
W1-4R	36"	36"		① ① ①	2	FLUORESCENT ORANGE	BLACK	BLACK	2	9.00	18.00			
W1-4L	36"	36"			2	FLUORESCENT ORANGE	BLACK	BLACK	2	9.00	18.00			
W5-1	36"	36"			2	FLUORESCENT ORANGE	BLACK	BLACK	2	9.00	18.00			
W13-1	24"	24"			2	FLUORESCENT ORANGE	BLACK	BLACK	0 (MOUNTED W/ WARNING SIGN)	4.00	8.00			
W20-1	36"	36"			10	FLUORESCENT ORANGE	BLACK	BLACK	10	9.00	90.00			
W20-4	36"	36"		↓ ↓ ↓	4	FLUORESCENT ORANGE	BLACK	BLACK	4	9.00	36.00			

① SEE MUTCD 2009 EDITION AND 2012 SUPPLEMENT TO THE 2004 STANDARD HIGHWAY SIGNS

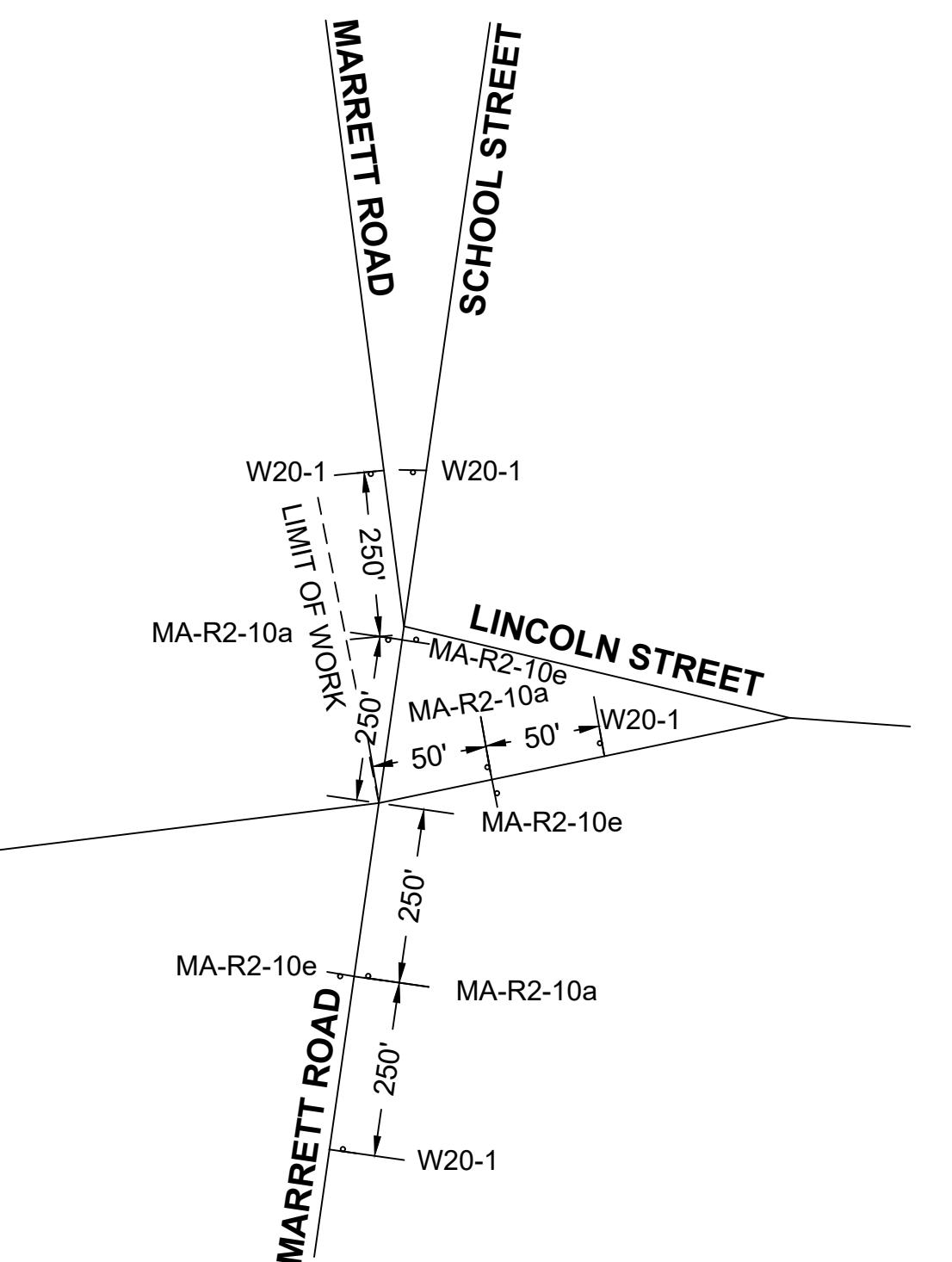
## LEGEND

- REFLECTORIZED DRUM
- PROPOSED TRAFFIC FLOW
- WORK ZONE
- TYPE III BARRICADE
- POLICE DETAIL
- CONSTRUCTION SIGN
- N.T.S.
- NOT TO SCALE
- FLAGGER



ADVANCED WARNING SIGN SCHEMATIC

N.T.S.



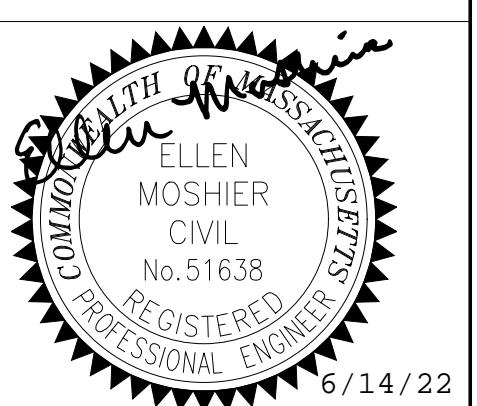
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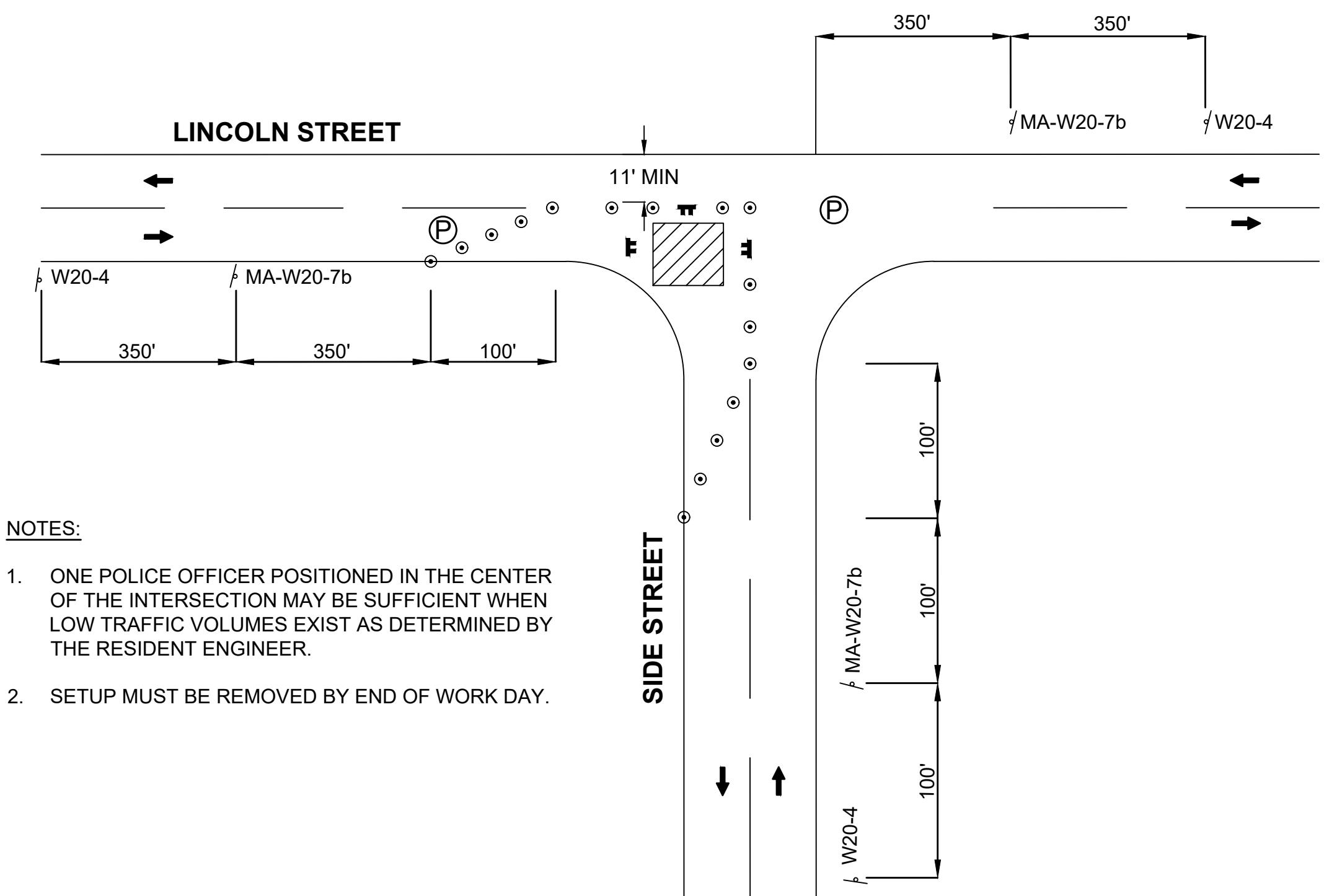


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## TEMPORARY TRAFFIC CONTROL PLANS - 2

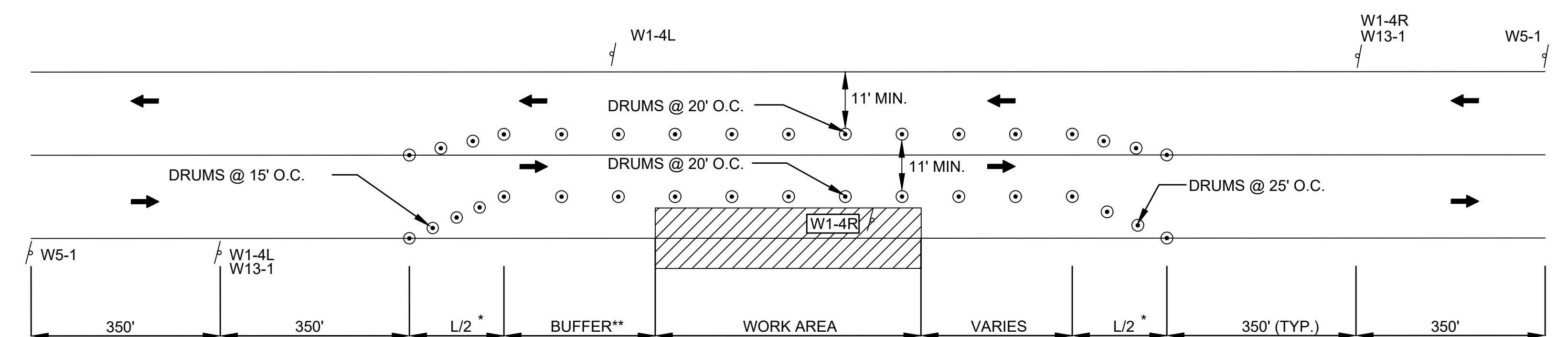
### LEGEND

○	CHANNELIZING DEVICE
→	PROPOSED TRAFFIC FLOW
▨	WORK ZONE
F	TYPE III BARICADE
P	POLICE DETAIL
π	CONSTRUCTION SIGN
↓	N.T.S.
	NOT TO SCALE



**TYPICAL MOBILE WORK AREA "OPERATIONAL"  
(DAY-TO-DAY) PLAN**

N.T.S.

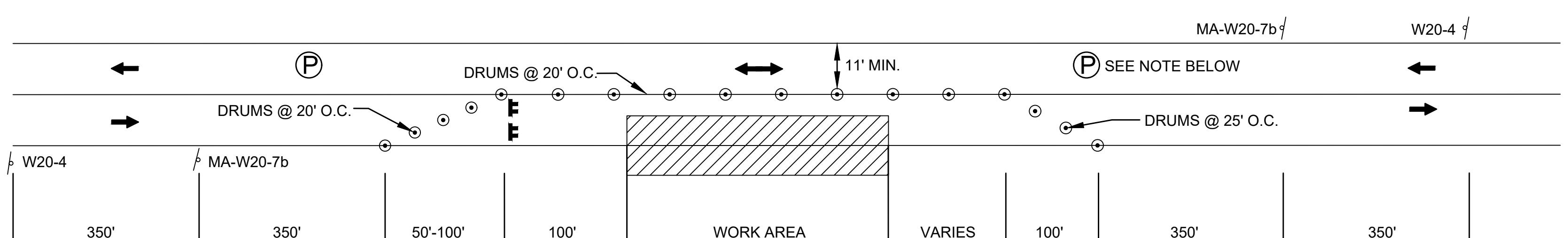


\*  $L = \frac{W^2}{60}$   
 L=TAPER LENGTH  
 W=WIDTH OF ROADWAY TO BE SHIFTED OR REDIRECTED  
 S=POSTED SPEED LIMIT

**TYPICAL TWO WAY STREET LANE SHIFT**

N.T.S.

\*\* SEE TABLE 1 FOR APPROPRIATE BUFFER BASED UPON SPEED



**TYPICAL TWO WAY STREET LANE CLOSURE**

N.T.S.

NOTE:  
 WORK THAT WILL DISRUPT EXISTING TRAFFIC PATTERNS WITHIN THE EXISTING ROADWAYS (LANE REDUCTION, ETC.)  
 SHALL ONLY BE DONE DURING OFF PEAK HOURS. NUMBERS AND LOCATION OF POLICE DETAILS FOR WORK ZONE  
 AND/OR DETOUR MANAGEMENT SHALL BE DETERMINED BY THE RESIDENT ENGINEER ON A CASE BY CASE BASIS,  
 AS WORK PROGRESSES.

**TABLE 1 – BUFFERS**

SPEED (MPH)	DISTANCE (FT)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

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Designed By:	Drawn By:	Checked By:
DC/JB	DC/JB	JGM

Issue Date: 06-14-2022 Project No: 71414 Scale: NTS

Drawing No.: 20 OF 20